III.—Notes on Indian Rhynchota; Heteroptera, No. 5. By E. T. Atkinson, B. A.

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Subfamily, Acanthosomina, Stål.

Oefvers. K. V.-A. Förh. (3), p. 32, 39 (1872): En. Hem. v, p. 108 (1876):— Acanthosomida, Stål, Hem. Afric., i, p. 33, 219 (1864).

a, b, c, as in Subfam. Pentatomina (J. A. S. B., pt. ii, p. 192, 1887).

(d.) Tarsi 2-jointed: scutellum not reaching the middle of the dorsum of the abdomen, generally very narrow at the apex; and furnished with frena extended almost to the apex: tibiae obtusely rounded, rarely furrowed. It contains those genera of the family Pentatomidæ of Dallas which have the scutellum triangular, subequilateral, or not much longer than broad, not reaching or barely extending beyond the middle of the dorsum of the abdomen, the apical part placed behind the frena, generally small, short, and narrow, the frena generally extended for a distance towards the apex of the scutellum, rarely reaching only the middle of the scutellum, apical margin of corium straight, rarely rounded towards the exterior apical angle, tibiae obtusely rounded, and the sixth ventral segment, in 2, rather strongly sinuated at the apex in the middle before the genital valvules.

Genus MICRODEUTERUS Dallas.

List Hem. i, p. 299 (1851); Walker, Cat. Het. ii, p. 390 (1868): Stâl, Oefvers. K. V.-A. Förh., p. 640 (1870): En. Hem., v, p. 110, 112 (1876):—Acanthosoma, pt., Herr. Schäff, Wanz. Ins., viii, p. 5 (1848).

Body elongate-ovate: head large, broad, gradually sinuately narrowed behind the middle, sides anteriorly parallel or barely diverging, apex broadly and obtusely rounded, tylus and juga subequal in length: antenne 5-jointed, basal joint short and stout, not extending beyond the apex of the head, second joint minute, third joint largest, nearly as long as the two following taken together, fourth longer than the fifth: rostrum rather long, reaching the base of the ventral spine; 2 and 3 joints about equal, the fourth shorter, basal joint half concealed within the head: pronotum anteriorly and sides distinctly margined, margins narrowly elevated and smooth, unarmed: scutellum rather small, longer than broad; frena not extending beyond the middle of the scutellum: membrane with longitudinal veins: mesostethial lamina reaching the head: sixth ventral segment, in 2, furnished, towards the

sides at the anterior margin, with a small cavity or hollow; pectus with a strong ridge, which is more elevated anteriorly, and cut off obliquely at its posterior extremity to make room for the ventral spine which is short, scarcely passing the posterior coxe.

295. MICRODEUTERUS MEGACEPHALUS, Herr. Schäff.

Acanthosoma megacephalum, Herr. Schäff., Wanz. Ins., viii, p. 5, t. 251, f. 783 et B (1848), Q.

Microdeuterus megacephalus, Stål, Oefvers. K. V.-A. Förh., p. 640 (1870); En. Hem., v, p. 112 (1876).

Q. Entirely dark ochreous-yellow; finely, impressly punctured: base and apex of scutellum red-brown, the base with four yellow spots (sometimes obsolete): the pronotum somewhat red-brown towards the margin and in the middle: spots on the posterior part of segments of the connexivum and its posterior prolongation, brown with a violet tint: beneath unicolorous: rostrum reaching the end of the second ventral segment; the ventral spine extending as far as the base of the first pair of feet (Herr. Schäff.). Stål notes that the rostrum, at least in the &, reaches somewhat the apex of the third ventral segment: the venter with a mediau ridge is continued up to the apex of the sixth segment, which, in the middle, is a little shorter than the three preceding taken together, and somewhat obtuse-angularly emarginate at the apex: lower margin of the genital segment clothed with long, dense hairs, lateral lobes gradually acuminate. Long, 12 mill.

Reported from Bengal, Calcutta, Sikkim (mihi).

296. MICRODEUTERUS DALLASI, n. sp.

Microaeuterus megacephalus, Dallas (nec Herr. Schäff?), List Hem., ii, p. 300, t. 10, f. 4 (1851): Walker, Cat. Het. ii, p. 390 (1867): Stål, Oefvers, K. V.-A. Förh., p. 490 (1870); En. Hem., v., p. 113 (1876).

Differs apparently chiefly in the spinose posterior prolongations of the connexivum: these are present, but are much less produced.

Reported from N. India.

Genus Acanthosoma, Curtis.

Brit. Ent. i, p. 28 (1824): Dallas, pt, List Hem. i, p. 198, 303 (1851); Walker, Cat. Het , ii, p. 392 (1867): Stål, Oefvers, K. V.-A. Förh., p. 368 (1870); (3) p. 39 (1872); En. Hem., ii, p. 61 (1870); v, p. 110, 113 (1876): Distant, Biol. Centr. Am. Rhyn., p. 100 (1879).

Head punctured, small or moderate, flat, triangular, gradually narrowed, narrow at the apex, with the tylus longitudinally impressed;

pronotum levigate, sides immarginate, process of the lateral angles not turning forwards, short, triangular, somewhat depressed: scutellum narrow at the apex, frena extended for a distance towards the apex apical margin of corium straight: first joint of the antenne extending beyond the apex of the head: mesostethial ridge high, laminated posteriorly, abruptly lower before the intermediate coxe, not produced hindwards between them; not or only very slightly extending beyond the anterior margin of the mesostethium, more or less distinctly rounded at the apex: apical angles of the sixth abdominal segment in σ rounded at the apex.

297. ACANTHOSOMA PROXIMA, Dallas.

Acanthosoma proximum, Dallas, List Hem., i, p. 303 (1851): Walker, Cat. Het. ii, p. 388 (1867).

Acanthosoma proxima, Stål, En. Hem., v, p. 113 (1876); Distant, Scient. Res. 2nd Yarkand Miss., p. 7 (1879).

Above brownish or yellowish green: very like A. hæmorrhoidalis, Linn., the lateral angles of the pronotum are less prominent, rufous, punctured black: apex of scutellum, black (Dallas). Long, 15½—16 mill.

Reported from Murree (Panjáb): Rawal Pindi (mihi).

298. Acanthosoma distincta, Dallas.

Acanthosoma distinctum, Dallas, List Hem., i, p. 304 (1851): Walker, Cat. Het. ii, p. 393 (1867).

Acanthosoma distincta, Scott, A. M. N. H. (4 s.) xiv, p. 290 (1874): Stål, En. Hem., v, p. 113 (1876): Reuter, Berlin Ent. Zeitschr., xxv, p. 75 (1881): Distant, Trans. Ent. Soc., p. 415 (1883).

σ. Above pale olive-green, rather thickly punctured with black, head pointed in front, finely punctured: pronotum with a transverse impunctate space towards the anterior margin; lateral angles prominent, subspinose, obtuse, ferruginous: scutellum brownish, becoming green towards the apex, with the apex itself whitish, membrane brownish, semitransparent, with a dark line at the base, surrounding the apical margin of the corium: abdomen above red, with the margins bright orange, with a black band at the junction of each segment: body beneath pale testaceous: abdomen with the emargination of the apical segment very deep reaching the middle of the abdomen; the margins spotted with black: legs pale greenish, with the tarsi fulvous. Antennæ rather long, pale greenish, with the two apical joints dusky ferruginous (Dallas). Long, 13—13\frac{1}{2} mill.

Reported from N. E. India, Murree (Panjáb), Darjiling, Japan.

299. ACANTHOSOMA DIFFICILIS Dallas.

Acanthosoma difficile, Dallas, List Hem., i, p. 304 (1851): Walker, Cat. Het. ii, p. 399 (1867): Stål, En. Hem., v, p. 113 (1876).

Jeale olive-green, tinted red and orange, punctured: head red-dish; juga wrinkled and with a few black punctures: pronotum rather thickly punctured, black; anterior and lateral margins reddish, lateral angles prominent, deep red: scutellum deep orange, with numerous scattered black punctures, disc of corium thickly and rather finely punctured, outer margin orange, rather strongly punctured black: membrane transparent, nearly colourless: margins of abdomen not spotted: body beneath dark orange: abdomen with the apical segment not very deeply emarginate: legs ferruginous-orange: antennæ with the three basal joints somewhat ferruginous (Dallas). Long, 13—14 mill.

Locality unknown.

300. ACANTHOSOMA DUBIA, Dallas.

Acanthosoma dubium, Dallas, List Hem., i, p. 304 (1851): Walker, Cat. Het., ii, p. 399 (1867): Stål, En. Hem., v, p. 113 (1876).

c. Closely allied to and hardly distinct from the preceding: differs in having the head anteriorly somewhat rounded: angles of pronotum less prominulous, rounded: third joint of the antennæ black at the apex (Dallas). Long, 13—14 mill.

Locality unknown.

301. ACANTHOSOMA LAEVICORNIS, Dallas.

Acanthosoma lasvicorne, Dallas, List Hem., i, p. 311 (1851): Walker, Cat. Het. ii, p. 399 (1867).

σ, ç. Above pale yellowish-olive: head triangular, pointed in front, with the tylus passing the juga, the surface slightly wrinkled, pronotum thickly and rather coarsely punctured; lateral angles produced into long, impunctate horns which are sometimes yellow, horns directed forwards and of the same thickness from the base to near the apex which is acute and slightly recurved: scutellum rather strongly but not very thickly punctured; hemelytra very thickly punctured membrane transparent, brownish: body beneath, orange or pale clive: abdomen impunctate, but very finely wrinkled towards the sides; apex sometimes bright red: legs and rostrum testaceous or pale alive: antenne testaceous, with the third joint black, except at the base (Dallas). σ, long, 15—16; ç, 21 mill.

Locality unknown.

302. ACANTHOSOMA FORFEX, Dallas.

Acanthosoma forfex, Dallas, List Hem., i, p. 308 (1851); Walker, Cat. Het., ii, p. 394 (1867); Stål, En. Hem., v, p. 115 (1876); Distant. Scien. Res. 2nd Yarkand Miss., p. 7 (1879).

d. Elongate, above pale olive-green, rather densely and strongly punctured black: head pale, with a few fine black punctures; the apex somewhat pointed, with the tylus longer than the juga; eyes black: pronotum with the lateral angles promiuent, forming a short, obtuse spine on each side; two yellowish impunctate patches close to the anterior margin, the lateral margins and angles reddish brown: scutellum with the disc reddish brown, with a yellowish, impunctate, median, longitudinal line; the lateral margins and the apex olive-green: membrane transparent, brownish. Body beneath, pale greyish green, tinted with red: abdomen impunctate, obtusely ridged in the middle; sexual organs greatly developed, the latenal pieces produced into two curved processes of a bright orange colour, bearing a small brush of hair at their apices, and nearly as long as the abdomen; the internal pieces black at the tip: prostethium densely and finely punctured: legs pale yellowish-green, with the tips of the claws black: rostrum testaceous, extreme tip pitchy black: antennæ pale yellowish-green, becoming brown towards the apex (Dallas). Long, $12\frac{1}{2}$ mill.

Reported from N. India: Murree.

303. ACANTHOSOMA ELONGATA, Dallas.

Acanthosoma elongatum, Dallas, List Hem., i, p. 309 (1851); Walker, Cat. Het., i, p. 394 (1867); Stål, En. Hem., v, p. 115 (1876).

§. Elongate, above yellowish-green, punctured with black: head slightly rugose, impunctate, somewhat pointed in front, with the tylus longer than the juga: eyes black: pronotum yellowish-green in front, reddish behind, coarsely and rather thickly punctured with black, with the exception of a transverse band near the anterior margin; lateral angles produced into strong, deep crimson spines, with the apex obtuse: sentellum coarsely but sparingly punctured with black, and with a reddish-brown, triangular mark in the middle of the base: coriaceous portion of the hemelytra reddish internally, the outer margin and the greater portion of the apex, yellowish-green; the whole surface densely and strongly punctured with black and somewhat rugose: membrane brownish transparent: body beneath, bright yellow, shining: abdomen impunctate, with a strong median ridge; sexual organs much developed, but much less so than in A. forfex; lateral processes bright red; pieces flat, yellow, widened, emarginate at the tip which is black: prostethium

with a few black punctures; posterior margin of the metastethium thickly and finely punctured: legs greenish-testaceous with tarsi dusky, and the tips of the claws black: tip of the rostrum, blackish; antenna with the basal joint greenish-testaceous: the remainder brown, becoming darker towards the apex (Dallas). Long, 144 mill.

Reported from N. India.

304. ACANTHOSOMA (?) BINOTATA, Walker.

Acanthosoma binotata, Walker, Cat. Het., ii, p. 395 (1867).

Testaceous, elongate-oval, roughly punctured; punctures brown: head elongate, smooth in front; tylus hardly extending beyond the juga: rostrum extending to the last coxe; tips black: antennæ slender, less than half the length of the body; joints successively increasing in length; first extending a little in front of the head: pronotum in front with a smooth band, of which the fore border is a curved pale testaceous line; sides and a slender stripe, pale testaceous; hind angles forming two long, acute, slightly recurved, spines: scutcllum with a slender pale testaceous stripe, on each side of which there is a brown patch; tip also brown: pectoral ridge well developed: abdomen beneath slightly ridged, with two incomplete macular brown stripes; spine extending to the intermediate coxe: hemelytra clouded with brown, around a smooth, transverse, pale-testaceous spot on the disc; membrane cinereous (Walker). Long, 63—7 mill.

Reported from India; differs from C. punctata, Dallas, by the thoracic spines.

305. ACANTHOSOMA ASPERA, Walker.

Acanthosoma aspera, Walker, Cat. Het., ii, p. 395 (1867): Distant, Scien. Res. 2nd Yarkand Miss., p. 7 (1879).

Testaceous, clongato-oval, thinly and roughly punctured; punctures mostly black: head clongate; tylus extending very little beyond the juga: rostrum extending a little beyond the hind coxe; tip black: antennæ slender, a little more than half the length of the body; first joint extending a little beyond the front of the head; second as long as the third; fourth a little shorter than the third; fifth black, testaceous towards the base, shorter than the fourth: hind angles of the pronotum forming two red, long, stout, acute, very slightly recurred and ascending, spines: pectoral ridge much developed: abdomen beneath slightly ridged; spine extending to the intermediate coxe: legs rather slender: membrane cincreous (Walker). Long, 9—9\(\frac{1}{2}\) mill.

Reported from India, Murree.

306. Acanthosoma (?) Truncatula, Walker.

Acanthosoma truncatula, Walker, Cat. Het., ii, p. 396 (1867).

Testaceous, broad, nearly oval, roughly punctured: head mostly smooth; tylus extending very little beyond the juga: rostrum extening to the last coxe; tip black: anteune slender, about half the length of the body; first joint extending beyond the front of the head; second as long as the third: pronotum with a smooth band in front, and with a slender paler stripe; hind angles forming two long, stont, hardly acute, directly diverging horns: pectoral ridge well developed: abdomen beneath smooth, slightly ridged; spine extending to the intermediate coxe: legs rather slender: membrane cinereous (Walker). Long, 6½ mill.

Reported from India.

307. Acanthosoma (?) immunda, Walker.

Acanthosoma immunda, Walker, Cat. Het., iii, p. 573 (1868).

Reddish testaceous, elongate-oval, roughly and rather thinly punctured: head elongate, triangular, blackish above, excepting the sides, which are reddish and slightly elevated: eyes red: antennæ testaceous, more than half the length of the body; first joint extending beyond the front of the head; second longer than the first and than the third; fourth a little longer than the third; fifth piecous, luteous at the base, longer than the fourth: pronotum with two stout acute spines which are black towards their tips and are nearly as long as half the breadth of the pronotum: scutellum with a black stripe, which is abbreviated towards the base: sternal ridge deep: ventral spine extending to the intermediate coxe: legs testaceous, slender: membrane pale cincrous, with a broad blackish stripe (Walker). Long, $7\frac{1}{2}$ mill.

Reported from India.

308. ACANTHOSOMA (?) ALATICORNIS, Walker.

Acanthosoma alaticornis, Walker, Cat. Het., iii, p. 573 (1868).

Tawny, elongate-oval, shining, roughly punctured: head elongate, slightly acute; sides reflexed: eyes piceous, not prominent: rostram extending to the last coxe; tip black: antenne piceous, slender; first and second joints testaceous; first extending much beyond the head; second as long as the third; fourth longer than the third; fifth shorter than the fourth: pronotum pale testaceous along each side in front, with a broad testaceous band between the horns which are as long as the intermediate breadth and are broad and linear from the base to near the

tips, where they are black, dilated and recurved; scutclinm less than half the length of the abdomen: pectoral ridge pale testaceous, extending to the head: abdomen ferrnginous, pale testaceous along each side, black at the tip; beneath with a pale testaceous stripe; ventral spine pale testaceous, lanceolate: legs slender, pale testaceous: hemelytra pale testaceous towards the base and along the hind border, and with a large pale testaceous apical spot which extends to the costa; membrane brown: wings cinereous (Walker). Long, 11½ mill.

Reported from India.

309. Acanthosoma (?) nigricornis, Walker.

Acanthosoma nigricornis, Walker, Cat. Het., iii, p. 574 (1868).

Tawny, elongate-oval, roughly and thinly punetured, testaceons beneath: head slightly acute, transversely and finely striated; sides reflexed: eyes piceous, not prominent: rostrum extending to the intermediate coxe, tip black: antennæ black, slender; first and second joints tawny; first extending much beyond the front of the head; second a little longer than the third; fourth longer than the second and than the fifth: pronotum with a transverse callus on each side in front; horns black, stout, shorter than the intermediate breadth, very slightly curved backward, tapering from the base to the tips, which are slightly rounded: seutellum very slightly ridged, less than half the length of the abdomen, much attenuated at the tip, which is rounded: pectoral ridge deep, extending to the head: abdomen black towards the tip above; ventral spine extending to the middle coxe: legs testaccous, slender: hemelytra with a brown costal stripe, which widens towards the tip; membrane brown: wings brownish cinereous (Walker). Long 143 mill.

Reported from India.

Genus Sastragala, Am. & Serv.

Hist. Nat. Ins. Hém., p. 155 (1813). Includes Acanthosoma, pt., Dallas, List Hom., j. p. 303 (1851): Stål, Oefvers. K. V.-A. Förh., p. 638 (1870); En. Hom., p. 110, 113 (1876).

Pronotum anteriorly levigate; within the levigate and more or less distinctly elevated apical margin with fewer punctures, which are placed in a row sometimes confused or here and there double; process of the lateral angles obtasely rounded, horizontal, not turning forwards: seutellum narrow at the apex: apical angles of sixth abdominal segment, in \$\mathscr{c}\$, straight or somewhat acute, not rounded: mesostethial ridge not produced hindwards, not, or but very slightly, extending be-

yond the anterior margin of the prostethium, more or less distinctly rounded at the apex.

310. Sastragala uniguttata, Donovan.

Cimex uniguttatus, Donovan, Ins. Ind. Hem., t. 8, f. 5 (1800).

Acanthosoma uniguttatum, Dallas, List Hem., i, p. 311 (1851); Walkor, Cat. Het., ii, p. 394 (1867).

Sastragala uniguttata, Stål, En. Hem., v, p. 113 (1876); excl. syn. Distant, A. M. N. H., (5 s.) iii, p. 45 (1879).

 σ . Pronotum with acute spines, ferruginous; scutellum marked with a large white dot (*Donov.*).

Donovan's figure agrees best with the description of S. heterospila, Walker, except that the latter has a black band or line between the lateral angles.

Reported from Madras, Assam.

311. Sastragala lineata, Dallas.

Acanthosoma (Sastragala) lineata, Dallas, Trans. Ent. Soc., v, p. 194 (1849): Walker, Cat. Het., ii, p. 396 (1867): Stål, En. Hem., v, p. 115 (1876).

Above dusky testaceous, strongly punctured with brown: head yellow, with a brown line on each side of the tylus, and a row of brown punctures on each of the juga; eyes brown: pronotum with the lateral spines acute, slightly recurred, pitchy brown; a transverse band near the antorior margin, and a narrow longitudinal line along the middle of the pronotum impunctate, yellow: scutellum, yellowish brown, paler towards the apex, and with a yellow spot in the middle of the base: hemclytra dusky testaceous, thickly and strongly punctured, the apex yellowish; a short, transverse, impunctate, orange band, near the outer margin, considerably beyond the middle, directed towards, but not reaching, the internal angle; membrane transparent, faintly clouded with brown: abdomen above deep red, the margins yellowish; head pronotum and abdomen beneath, with the legs, rostrum and antennæ testaceous; the antennæ rather darker; rentral spine short, scarcely reaching the intermediate legs (Dallas). Body long, 7 mill.

Reported fron Sikkim.

312. SASTRAGALA BINOTATA, Distant.

Sastragala binotata, Dist., Trans. Ent. Soc., p. 353, t. 12, f. 12 (1887).

Apex above brownish ochracous; corium with the lateral margins—widened into a spot in the middle—dull ochraceous, inwardly shaded blackish, membrane bronzy: head transversely wrinkled: antennæ

ochraceous, third joint much longer then the second: pronotum and scutellum sparingly and coarsely punctured, the corium more thickly punctate: lateral angles of pronotum produced into long, somewhat conical spines, their apices subacute, and very slightly reflexed hindwards: body beneath and legs ochraceous; apex of rostrum pitchy (Dist.). Long, 13; exp. angl. pron. 10 mill.

Reported from Sikkim (mihi).

313. SASTRAGALA RUFISPINA, Distant.

Sastragala rufispina, Dist., Trans. Ent. Soc., p. 325 (1887).

Body above dark ochraceous, pronotal angles purplish red: head finely and transversely wrinkled, apical part of tylus fovcated and excavated: pronotum, scutellum and corium somewhat sparingly and coarsely punctate: lateral angles of the pronotum produced in obtusely pointed spines: membrano pale hyaline, blackish at the base: body beneath very pale ochraceous, legs a little darker in hue: apex of the rostrum pitchy, reaching second abdominal segment; last abdominal segment with two small black spots at the apex: pronotal spines red, beneath as above (Dist.). Long, 17; exp. angl. pron., 11 mill.

Reported from N. India.

314. SASTRAGALA MUSTELINA, Distant.

Sastragala mustelina, Dist., Trans. Ent. Soc., p. 352 (1887).

Body above ochraceous; membrane pale brownish; connexivum with the segmental spines black: antenne ochraceous, apical half of third joint infuscate, third joint much longer than the second; head somewhat obscurely transversely wrinkled, eyes pitchy: pronotum, scutellum and corium coarsely punctate: lateral angles of the pronotum produced into long, straight, somewhat conical, subacutely pointed spines; body beneath, rostrum and legs coloured as above: extreme apex of rostrum pitchy (Dist.). Long, 13; exp. angl. pron., 11 mill.

Reported from Naga Hills (Assam).

315. Sastragala heterospila, Walker.

Acanthosoma heterospila, Walk., Cat., ii, p. 894 (1867).

Testaceous, elongate-oval, roughly punctured: head and fore-part of the pronotum with a reddish tinge; elongate, tylus extending very little beyond the juga; rostrum extending a little beyond the hind coxes; tip black; antenne slender, about half the length of the body; first joint extending beyond the front of the head; second much shorter the third; fourth longer than the third: pronotum with a black band, which occupies the hind border and includes the hind angles; these form two long acute directly diverging spines: scutellum black, with a large luteous spot in the disc; tips whitish: pectoral ridge well developed: abdomen slightly ridged beneath; spine extending to the intermediate .coxw: legs rather stout: hemelytra black along the hind border and irregularly black along the outer border; membrane brown, cincreous along the outer border, including a white costal spot at its base (Walker). Long $9\frac{1}{2}$ mill.

Reported from the Panjab: Bunkoti in Jaunsar, 9000 feet (mihi).

316. SASTRAGALA PARMATA, Distant.

Sastragala parmata, Distant, Trans. Ent. Soc., p. 353 (1887).

Body above brownish-ochraceous; spines on pronotum reddishbrown; scutellum with a large cordate ochraceous spot, surrounded with blackish; antennæ ochraceous, 3-4 joints subequal in length, a little shorter than the fourth: eyes purplish-brown: pronotum sparingly and coarsely punctate, the lateral angles produced into long, thick, rounded spines, very slightly reflexed at the apices: scutellum with the median spot levigate, remainder coarsely punctate, apex ochraceous; corium coarsely punctate, with the lateral margin luteous and levigate: body beneath and legs ochraceous; apex of rostrum pitchy (Dist.). Long, 12; exp. angl. pron., 9 mill.

Reported from N. India.

Genus ANAXANDRA, Stål.

En. Hem. v, p. 110, 113 (1876).

Mesostethial ridge long, rather prominent to a distance before the auterior margin of the prostethium, with the apical part before the same margin prominulous, gradually narrowed or acuminated: process of the lateral angles of the pronotum turning outwards, slightly upwards and distinctly forwards, pronotum at the anterior margin with punctures arranged confusedly in somewhat like two rows; apical angles of the sixth segment of the abdomen, in \mathcal{E} , somewhat obtuse.

317. Anaxandra rufescens, Dallas.

Acanthosoma rufescens, Dallas, List Hem., i, p. 311 (1851); Walker, Cat. Het., ii, p. 399 (1867).

Anaxandra rufescens, Stål, En. Hem., v., p. 114 (1867): Router, Berlin. Ent. Zeitschr., xxv, p. 77 (1881).

Q. Head dull olive, impunctate, pointed in front, with the vertex

orange: pronotum with the anterior portion olive, rather coarsely but sparingly punctured with black, and with a broad, impunctate, orange band near the anterior margin; posterior portion ferruginous, rather thickly punetured with black; lateral angles produced into long, acute, red spines, which are directed a little forwards, but have the apex slightly turned back; the basal portion of these spines is coarsely punctured with black, the apex smooth. Scutellum ferruginons olive, sparingly and irregularly punctured with black; the apex testaceous: hemelytra thickly and rather strongly punctured with black, with the outer margin, as far as the submarginal vein, olive; membrane transparent, brownish: body beneath orango; pectus yellowish; abdomen with the posterior angles of the last segment, and the posterior margins of the intermediate and apical vulvar plates, bright red; legs pale vellowish olive, with the base of the femora and the tarsi orange-testaeeous: rostrum short, testaeeous: antennæ pale olive (Dallas). Long, 16-17 mill.

Reported from India, Darjiling (mihi).

318. Anaxandra cornuta, Dallas.

Acanthosoma cornutum, Dallas, Trans. Ent. Soc., v, p. 193, t. 19, f. 6 (1849); Islam, i, p. 312 (1851); Walker, Cak. Het., ii, p. 39 t (1867). Anagandra cornuta, Stål, En. Hem., v, p. 114 (1876).

\$\textit{\circ}\$. Above olive, slightly clouded with yellowish, rather thickly and strongly punctured: pronotum with the lateral angles strongly cornuted; the processes being more darkly coloured than the rest of the surface: the antero-lateral margins of the pronotum beneath are greenish: scutellum acute, slightly sinuated on each side, immediately before the apex; hemolytra thickly and strongly punctured; membrane brownish at the base, particularly at the internal angles: joints of the antennae concolorous with the body, the apex, and sometimes the whole of the joints pitchy: legs pale brownish yellow, with the tibic and tarsi somewhat darker: ventral spine long, reaching as far as the base of the anterior legs.

J. With the pronotal processes dark olive green, rounded at the apex, beneath flat, but not grooved: the membrane is pale and semitransparent; the abdomen above red, with broad whitish margins: the body beneath is pale cohraceous, with a reddish tinge towards the apex of the

abdomen: ventral spine pale.

tral spine pale, tipped with brown: pectus brownish, with the sternal ridge semitransparent: head beneath brownish (Dallas). Long, 13; breadth of pronotum 10 mill.

Reported from Sikkim (mihi).

319. Anaxandra nigro-lineata, Stål.

Anaxandra nigro-lineata, Stål, En. Hem., v, p. 114 (1876).

 \S . Olivaceous-flavescent, sparingly punctured above; three apical joints of the antenne, lateral margins and longitudinal line (anteriorly abbreviated, posteriorly fissured) on the head, longitudinal line on the pronotum before the middle, apical interior spot on the last segment of the connexivum, basal band (posteriorly bisimuate) on the last dorsal segment, and a transverse line on the mesopleure, black: flavescent spot on the scatellum, exteriorly and posteriorly margined with black; exterior margin of scutellum punctured in rows at that spot: lateral angles of the pronotum produced in a very long process, sparingly punctured, smooth towards the apex, acuminate and slightly recurved at the apex: dorsum of abdomen sub-sanguineous: membrane slightly infuscate, exterior margin (base excepted) deeper fuscous: wings infuscate (Ståt). Body long, 17; breadth of pronotal processes, 18 $\frac{1}{2}$ mill.

Reported from India, Darjiling (mihi).

In form and punctuation very like A. cornuta, Dallas: pronotal processes longer and turning less upwards.

320. Anaxandra sigillata, Stål.

Anaxandra sigillata, Stål, En. Hem. v, p. 114 (1876).

 $\mathfrak P$. Closely allied to A. nigro-lineata, Stål, but smaller, pronotal processes shorter, above black, anteriorly at the apex more strongly rounded, membrane more obscure, exterior limbus pale at the base, margins of the head concolorous, and pronotum without a black longitudinal line; spot on the scutellum at the very narrowly blackish anterior margin sparingly punctured (Stål). Long, 13; breadth of pronotal processes, 10 mill.

Reported from India.

321. Anaxandra nigrocornuta, Reuter.

Anaxandra nigrocornuta, Renter, Berlin. Ent. Zeitschr., xxv, p. 77 (1881).

Q. Olivaceous, greenish, head a little, pronotum and scutellum sparingly irregularly, and hemelytra more densely punctured black; head, sutures towards the base of the clypeus, and two approximated dots on the margin of the vertex, black; apical half of third joint of the antennæ and two last joints, black; anterior band on the pronotum and its sides posteriorly towards the angles, base of scutellum, clavus towards the apex and corium at the claval suture, ferruginous; lateral angles of pronotum produced outwards in a very long horn, entirely black up to the sparingly punctured apex, acuminate at the apex and distinctly recurved, convex on the anterior margin; this horn is as long as the base of the scutellum, slightly rising: membrane smoky with a small whitish dot at the base of the exterior margin : dorsum of abdomen red, apex black, the dorsal genital lobes, in 2, however, have a red spot; posterior angles of segments of connexivum, black; body beneath pallid. Horns of pronotum beneath olivaceous-virescent-ferruginous, punctured black; pectus palely flavescent, colour verging somewhat into ruddy; prostethium punctured, auterior lateral margin virescent, meso- and meta-stethium somewhat smooth: iuferior margiu of mcsostethial plate rounded: venter slightly rufescent, apical angles of the segments of the convexivum, varrowly black: dorsal genital lobes, iu 2, obliquely rounded outward, there before the base abruptly strongly oblique, slightly concave (Reuter). Long, 131 mill.

Reported from Darjiling.

322. Anaxandra fulvicornis, Distant.

Anaxandra fulvicornis, Dist., Trans. Ent. Soc., p. 354 (1887).

Body ochraceous, with an olivaceous tinge: anterior lateral margins of the head, a median narrow longitudinal stripe commencing before the apex of the head and ending on the disc of the pronotum, and the lateral margins of the sentellum (united before the apex), black: basal joint of antennæ ochraceous: pronotum with the disc posteriorly coarsely punctate, lateral angles produced into long, slightly ascending, and directed forwards, dull-luteous spines, of which the apices are very slightly reflexed and subacute: basal two-thirds of scutellum luteous, posteriorly rounded, and margined black: corium coarsely punctate and rugulose: membrane brown: body beneath and legs ochraceous: mesonotum with an oblique black line on each side. Closely allied to A nigro-lineata, Stål, but differs in the smaller expanse of the pronotal angles (Dist.). Long, 15; exp. angl. pron. 14 mill.

Reported from Sikkim.

323. Anaxandra tauriformis, Distaut.

Anaxandra tauriformis, Dist., Trans. Ent. Soc., p. 354 (1887).

Body above bright castaneous: lateral margins of the head, ante- 5

rior and lateral margins and posterior disc of the pronotum, lateral margins of the sentellum, lateral margins of the corium and the membrane, ochraceous: 1-2 joints of the antenne, ochraceous: head transversely wrinkled and with a few dark punctures: eyes greyish-brown, margined inwardly ochraceous: pronotum on the disc sparingly and coarsely, on the anterior margin thickly, punctate; humeral angles produced upwards and forwards into long spines of which the apices are distinctly truncately reflexed hindwards, these spines are sparingly punctate for about half their-length: soutellum sparingly and coarsely punctate: corium thickly punctate: abdominal spines above and beneath castaneous, but beneath inwardly margined blackish: body beneath and legs ochraceous (Dist.). Long, 15; exp. angl. pron. 14½ mill.

Reported from Khasiya Hills (Assam).

324. Anaxandra hamata, Reuter.

Anawandra hamata, Reuter, Berlin. Ent. Zeitschr., xxv, p. 78 (1881).

 σ . Very like A. rufescens, Dallas, differs however in the lateral horn of the pronotum, also (in σ) in anterior margin before the apex itself, being a little more distinctly convex, entirely sanguineous, and especially in the structure of the genitalia in the σ . First genital segment about one-third shorter than preceding, apical margin slightly sinuate, second segment uncovered on the margin, straight in the middle, with two small bands subvertically placed in the middle itself, shortly but densely fulvous-pilose, apical angle produced in a long, somewhat incurved horn, this horn furnished at the apex with a densely fulvous pilose fascicula, its exterior margin as long as the lateral margin of the preceding segment, inferior margin as long as the margin of the apical segment: styli briefly biramose at the apex, upper rataus narrow and acutely acuminate, apex somewhat curved, inferior broader and more obtuse, abruptly dentately contracted at the apex (Reuter). Long with membrane 15 mill.

Reported from Darjiling.

325. ANAXANDRA COMPACTA, Distant.

Anaxandra compacta, Dist., Trans. Ent. Soc., p. 355 (1887).

Body above ochraceous, with an olivaceous tinge; head with the basal margin, a spot behind each eye, and the margins of the tylus (not reaching the apex), two circular enclosing lines near anterior margin of pronotum, and a large median rounded spot near the base of the scutellum, black: angles of the pronotum, castaneous: both pronotum

and scutellum very obsoletely and obscurely punctate; the corium finely but distinctly punctate: angles of pronotum produced in short, robust spines of which the apices are rounded above and subtruncate: body beneath ochraceous, much tessellated with black: the pronotal spines above castaneous (Dist.). Long, 10; exp. angl., pron., 10 mill.

Reported from Sadiva (Assam).

Genus Clinocoris, Hahn, Stål.

Pt. Wanz. Ins. ii, p. 70 (1834); Stål, Oefvers. K. V.-A. Förh., xxix (3), p. 39 (1872); En. Hem., v, p. 110, 114 (1876). Includes Sastragala, Fieber, Eur. Hem. p. 78, 327 (1861);—Elasmostethus, pt. Fieber, L. c., p. 78, 328 (1861);—Elasmostethus, Stål, A. S. E. F. (4 s.) iv, p. 54 (1864); Oefvers. K. V.-A. Förh. p. 638 (1870);—Meadorus, Muls. and Rey, Pun. France, Papt., p. 315 (1866)

Antennæ 5-jointed, two-thirds of the length of the body, inserted under the margin of the head forwards in a small elevation, the first joint stout and almost as long as the third; the second as long as the fourth but thinner; the third somewhat shorter than the fourth which however is stouter and almost as stout as the rounded fifth joint: rostrum 4-jointed; ocelli small, placed near the posterior margin of the head: corium besides the strong vein on the inner margin, with a longitudinal vein arising at the base and bifurcated before the middle: membrane with a transverse cellule-like vein emitting six longitudinal veins towards the external margin; feet comparatively long and slender. The mesostethial ridge posteriorly is produced hindwards between the intermediate coxæ: the posterior lateral margins of the pronotum are narrowly depressed and slightly amplified; the furrow from the orifices short, or somewhat so: two apical ventral segments in 9, without a subimpressed, opaque, lateral spot.

326. CLINOCORIS RECURVUS, Dallas,

Acanthosoma recurvum, Dallas, List Hem., i, p. 310 (1851); Walker, Cat. Het. ii, p. 394 (1867).

Clinocoris recurvus, Stål, En. Hem., v, p. 114 (1876).

Q. Ovate, above pale olive, punctured with black: head thickly and finely punctured with black, the tylus longer than the juga: pronoun thickly and strongly punctured with black; the lateral angles produced into strong, acute, slightly recurred, deep red spines; the disc with a broad, transverse, yellowish white band across the middle: membrane transparent, brownish: margins of the abdomen dull orange, with a black spot at the posterior angle of each segment; body beneath fulvous, punctured with black; the abdomen sparingly and finely, the

pectus more thickly and coarsely punctured: ventral ridge, impunctate, well marked, but not very prominent: legs yellowish testaccous, with the claws black: rostrum testaccous, with the apex black: antenne testaccous, with the apical half of the fifth joint black (Dallas). Long, 10½ mill.

Reported from N. India.

327. CLINOCORIS PUNCTATUS, Dallas.

Acanthosoma punctatum, Dallas, List Hem., i, p. 306 (1851); Walker, Cat. Het. ii, p. 393 (1867).

Clinocoris punctatus, Stål, En. Hem., v, p. 114 (1876).

e. Greenish testaceous, coarsely punctured: head punctured with brown; tylus passing the juga: pronotum strongly and closely rugosely punctate, the punctures brown: scutellam triangular, with the apex much attenuated and produced, strongly but not thickly punctured with brown: corium very coarsely punctured, but with a small impunctate patch on the disc a little behind the middle: membrane transparent, colourless: margins of the abdomen with a small spine at the posterior angles of each segment, and with a small black spot on each segment at the posterior margin: abdomen beneath coarsely and sparingly punctured on the sides, the disc impunctate and with a very distinct median longitudinal ridge: pectus thickly and strongly punctured, especially on the sides: legs orange-testaceous: antennæ testaceous, with the two apical joints brown (Dallas). Long, 9—9½ mill.

Reported from N. India.

328. CLINOCORIS CRUCIGER, Reuter.

Clinocoris cruciger, Reuter, Berlin. Ent. Zeitschr., xxv, p. 80 (1881).

e. Saturated ochraceous, head with some fine punctures, pronotum, scutellum and hemelytra strongly impressly-punctured: third joint of the antennæ subequal in length to the second, two last equally long, last black, base pallid: anterior lateral margins of the pronotum, with an arch just behind the apical margin, a longitudinal line and another transverse line just behind the middle forming a cross with the former, and lateral angles, impunctate, levigate; these lateral angles straightly, spinosely produced outward, with a distinct spine slightly recurved, not quite acute; membrane hyaline, with a band irregularly streaked fuscescent: abdomen above unicolorously ochraceous, beneath with two discoidal bands and a lateral row of spots on both sides, pale yellowish. Rostrum not extending beyond the last coxæ: the part of

the posterior margin of the pronotum between the margin of the corium and angle, equal in length to the remaining part, towards the base much, and towards the angle slightly sinuated, the latter part within the margin of the corium straight, very slightly oblique, whence the basal margin slightly and very broadly sinuate, basal angles very obtuse: scutellum with almost two rows of dots towards the apex which is not quite acute: exterior margin of corium, behind the middle, strongly roundly amplified towards the apex : pectus sparingly, prostethium strongly, punctured fuscous; mesosternal plate much higher towards the apex than before the intermediate coxe, apex almost extending beyond the prosternum, and apical margin obliquely truncate, inferior margin slightly rounded towards the apex and towards the intermediate coxe gradually broadly but strongly sinuate : yentral spine reaching the apex of the mesosternal plate: sixth ventral segment, in 2, emarginate at the apex: apical margin truncate in the middle, folded at the angles of the emargination; superior genital lobes short, very slightly rounded at the apex, contiguous to entire interior margin (Reuter), Long, 62; with membrane, 8 mill.

Reported from Darjiling.

329. CLINOCORIS SCUTELLATA, Distant.

Clinocoris scutellata, Dist., Trans, Ent. Soc., p. 355 (1887).

Body above ochraceous, thickly and coarsely punctate: spines of pronotum rosy red: scutcilium with a blackish median longitudinal band extending from about the base to the middle: antenne ochraceous: lateral angles of the pronotum straightly produced into subacute spines of which the apices are slightly reflexed hindwards, and the posterior margins are somewhat sinuated: membrane pale hyaline, with reflections of the red upper surface of the abdomen: body beneath and legs ochraceous: sternum coarsely punctuate (Dist.). Long, 8; exp. angl. pron., 6 mill.

Reported from Naga Hills (Assam).

330. CLINOCORIS MACULATA, Distant.

Clinocoris maculata, Dist., Trans. Ent. Soc., 355 (1887).

Body above black ochraceous: pronotum and scutellum coarsely but sparingly punctate, corium thickly punctate: spines of pronotum black; corium with a levigate, ochraceous spot on the disc of the apical area: punctuation entirely dark-brownish and the corium is therefore much darker than the pronotum or scutellum: lateral angles of pronotum produced into stout spines of which the apices are subacute and prominently reflexed, and their posterior margins sinuated: membrane very pale ochraceous, pitchy towards the apex: body beneath apparently ochraceous (Dist.). Long, 8; exp. angl. pron. 6 mill.

Reported from N. E. India.

Subfamily UROSTYLINA, Dallas.

Urostylidæ, Dallas, Trans. Ent. Soc., n. s. ii, p. 15, (1852); List Hem., i, p. 313 (1851); — Urolabidina, Stål, En. Hem., v, p. 115 (1876).

Antennæ 5-jointed, basal joint extending to a distance beyond the head: rostrum short, scarcely passing the anterior eoxæ, basal joint enclosed in a groove: head small, tylus as long as the juga, lateral margins not trenchant; antenniferous tubercles exserted: genitalia generally more or less produced: odoriferous orifices spinose: peetus not sulcated (Dallas).

I. Ocelli present.

a. Basal joint of the antennæ nearly as long as the head and the pronotum taken together; antennæ very slender:—2. Urostylis.

b. Basal joint of the antennæ not twice the length of the head, much shorter than the head and pronotum; antenæ stouter:—1. Urochela.

II. Oeelli wanting :- 3. Urolabida.

Genus UROCHELA, Dallas.

Trans. Ent. Soc., n. s., i, p. 2 (1850); List Hem., i, p. 313 (1851); Walker, Cat. Het. ii, p. 410 (1867); Stål, En. Hem. v, p. 115 (1876).

Head small, short, broader than long, abruptly narrowed, just before the eyes; juga and tylus produced, distinct, rounded; tylus longer than the juga; eyes large, prominent, globose; ocelli moderate, situate close to each other at the back of the head; antennæ longer than the body, 5-jointed, inserted in a tubercle which appears beyond the margin of the head, just before the eyes; first joint stoutest, as long as the pronotum, cylindrical, thinner at the base; second about half as long again as the first, and a little stouter than the second; fourth about as long as the first, slender; all clothed with fine short hairs which are longer on the first joint: rostrum inserted close to the anterior margin of the head, short, reaching only to the middle of the mesostethium, 4-jointed, I and 3 joints nearly equal, fourth shorter, second longest; the first at its base enclosed in a small groove of the underside of the head; labrum reaching the middle of the second joint of the rostrum, transversely striated. Body broad, very flat above, convex beneath: pronotum trapezoidal, slightly margined laterally, much narrowed in front, the anterior

margin being considerably narrower than the head and eyes: scntellum rather short, triangular, with the sides nearly straight and the apex acute. Hemelytra ample, the coriaceous part larger than the membranous, with the basal half of its outer margin much elevated; a vein which arises from a strongly elevated line at the base, runs about twothirds the length of the corium, where it emits a branch on its inner side which reaches the base of the membrane, and passing into it, gives rise, after running singly for a short distance, to five veins on the disc of the membrane, of which the two inner and the two outer ones are united at the base before joining the common trunk; the membrane reaches beyond the apex of the abdomen, and has six veins, of which the outer one is very short, placed at the basal angle. Abdomen convex beneath, the margins thin, projecting a little beyond the hemelytra on each side: the anal apparatus, in d, consists of two claw-like processes which project nearly as far as the posterior angles of the terminal segment of the abdomen, with their points turned outwards; a small triangular plate is situate at the base of these which it partially covers. and within the cavity appears the apex of a second triangular piece. which is probably the margin of the dorsal portion of the segment; all these parts are clothed with long woolly hairs, which nearly fill the intermediate spaces: in the Q, the vulvar plates are not remarkable: the pectus is flat; mesostethium broad, placing a considerable interval botween the insertions of the anterior and the intermediate feet; on each side of the metastethium close to its anterior margin and near the intermediate coxe is a small spine directed outwards and forwards, these appear to be perforated on their posterior surface, at about half their length and are evidently formed by the produced margins of tho odoriferous apertures: legs moderate, slender, the posterior pair longest; tarsi 3-jointed, 1 and 3 about equal, the second minute (Dallas). Distinguished from Urostylis, Westw., by its stout antennæ of which the first joint is not much longer than the head.

331. UROCHELA QUADRIPUNCTATA, Dallas.

Urochela 4-punctata, Dallas, Trans. Ent. Soc. (n. s.) i, p. 3, t. 2, f. 1 (1850) : Walker, Cat. Het., ii, p. 410 (1867); Stal, En. Hem. v, p. 115 (1876).

Body elongate-ovate, above ferruginous grey, finely and thickly punctured: pronotum narrowly margined with yellow and with a narrow impunctate, longitudinal line on the disc, of the same colour; a small black spot on the lateral margin, near the lateral angle: scutellum with a narrow longitudinal yellow line, continuous with that of the pronotum, the lateral margins yellowish: the basal third of the onter margin of the hemelytra and a small line in the yellow basal portion, a spot on the disc, and another at the middle of the apical margin, black; membrane pale brown, with the veins paler. Counexivum banded with yellow and black; abdomen beneath smooth, impunetate, yellow; a spot on each side of each segment within the stigmata, and another on the lateral margin, black; head beneath, pectus and rostrum, testaceous; the apex of the latter, pitchy: legs dusky testaceous, femora punctured with pale brown: antennæ with the basal joint dusky testaceous, second black, pale at the base, 3-4 joints black, basal portion of the latter, yellowish white (Dallas). Long, 9 mill. Type.

Reported from Bhutan, Sikkim; very common on Observatory Hill, Darjiling, at the end of the rains (mihi), and at Mungphu.

332. UROCHELA GUTTULATA, Stål.

Urochela guttulata, Stål, En. Hem., v, p. 115 (1876).

Q. Palely grey-flavescent, above more densely and more distinctly, beneath more remotely and more finely, punctured fuscous; antenne blackish; first joint altogether or only towards the base, 4-5 joints towards the base, greyish-flavescent: a line on the pronotum and scutellum, more or less distinct, levigate, anterior sears inwardly blackish: hemelytra with a small fuscous spot on the disc and at the middle of the apical margin, sometimes absent: membrane fuscous with small rounded pallid spots, here and there confluent; lateral streak on the pectus and lateral spots arranged in longitudinal rows, black (Stâl). Long, 12; broad, 5½ mill.

Like *U. quadripunctata*, Dallas, but larger, antennæ shorter and more slender, lateral margins of pronotum dilated, before the middle obtusely roundly-amplified and obsoletely sub-sorrate, slightly sinuated in the middle, the levigate line on the pronotum and scutellum much less distinct, sometimes partly evanescent; membrane sprinkled with pallid dots; pectus very distinctly streaked with black.

Reported from Darjiling, Mungphu (mihi).

333. UROCHELA PILOSA, Stål.

Urochela pilosa, Stål, En. Hem., v, p. 116 (1876).

d. Palely greyish-flavescent, pilose: pronotum, scutellum, hemelytra and prostethium somewhat strongly punctured black, the former further adorned with fine subferruginous dots: 2-5 joints of antennæ black; 4-5 joints flavescent at the base: lateral limbus of pronotum and hemelytra also dorsum of abdomen, weakly ferruginous: membrane fuscous-vinaceous: two spots on the hemelytra, a band on the segments of the connexivum, and the circuit of the spiracula, black;

sides of venter, punctulate. The d has the genital segment retuse; sides emitting a process turning upwards, acuminate at the tip, somewhat longer than broad at the base. Long, $10\frac{1}{3}$; broad, $4\frac{1}{2}$ mill.

Distinguished from the preceding by being somewhat broader, dorsal punctuation stronger, without the ventral spots arranged in rows or the levigate line on the pronotum and scutellum: lateral margins of pronotum anteriorly obtusely rounded, prominent, not sinuated in the middle, (Stål).

Reported from Darjiling.

334. UROCHELA BIMACULATA, Dallas.

Urochela bimaculata, Dallas, List Hem., i, p. 313 (1851); Walker, Cat., Het., ii, p. 410 (1867); Stål En. Hem., v, p. 116 (1876).

2. Head, pronotum and scutellum brownish grev, thickly and finely punctured with black: head with two black streaks on the vertex: pronotmu with the lateral margins considerably waved: corium whitish, finely punctured with brown and with numerous scattered coarse black punctures: the middle of the disc with a large brown spot. membrane semitransparent, brownish: margins of the abdomen dark brown, with a yellow line on each of the sutures: body beneath fulvous: abdomen with the disc shining, faintly wrinkled transversely and rather sparingly punctured with black; the sides somewhat opaque, thickly and finely punctured with black; the stigmata and two rows of spots on each side of the abdomen black: pectus rather thickly and finely punctured on the sides, with the sternum nearly impunctate: femora testaceous, very thickly covered with fine black or brown points; tibiæ brownish at the apex: tarsi with the apical joint brown: rostrum testaceous, with the tip pitchy: antennæ with the basal joint greyish-testaceons, thickly covered with very minute black points; 2-3 joints black; 4--5 black, with the base yellow (Dallas). Long, 13-14 mill.

Reported from N. Iudia.

UROCHELA OBSCURA, Dallas.

Urochela obscura, Dallas, List Hem., i, p. 314 (1851); Walker, Cat. Het., ii, p. 410 (1867); Stål, En. Hem., v, p. 116 (1876).

J. Q. Above brown, somewhat obscure, densely and finely punctured; head impunctate, black, with a spot on each side within the eyes, a spot on the middle of the vertex, and the apices of the juga, brown : lateral margins of the pronotum waved, narrowly edged with yellow: sentellum rather coarsely punctured with black, with the basal angles yellowish;

the apex with an indistinct reddish longitudinal ridge: hemelytra clouded with blackish; membrane brown, opaque: margins of the abdomen black, with a yellow line on each of the sutures: body beneath reddish: abdomen impunctate, minutely transversely rugose, with the stigmata black: pectus finely punctured with black on the sides; pectus impunctate, black: legs brownish; femora with brown dots: rostrum brownish testaceous, with the tips pitely; antenne with the basal joint pitely brown, paler at the base; 2—4 joints, black; fifth joint orange, tip black: anal plate, in \$\mathcal{C}\$, is entire, convex, and encloses a second plate, within and above which the sexual organs are visible (Dallas). Long, $10\frac{1}{2}$ —12 mill.

Reported from India.

336. UROCHELA DISCREPANS, Walker.

Urochela discrepans, Walker, Cat. Het., ii, p. 411 (1867).

Tawny, elongate-elliptical, thinly punctured, a little paler beneath; punctures brown or black; head with a black spot on the hind border; tylus conical, extending much beyond the juga; rostrum extending nearly to the hind border of the third ventral segment; tip black; antennæ black, more than half the length of the body; first joint extending much beyond the front of the head; second as long as the first; third about half the length of the second; fourth a little shorter than the second; fifth reddish, piceous towards the tip, a little shorter than the fourth: pronotum with four incomplete and irregular black stripes and with black, slightly reflexed sides: scutellum with two broad black stripes, and with a black dot on each fore angle: pectus and under side of abdomen with four rows of black points: hemelytra with two black dots, one on the disc and one on the middle of the outer border: membrane lurid cinereous. Distinguished from U. bimaculata by the tylus being more prominent, and the first joint of the antennæ being more slender (Walker). Long, 121-13 mill.

Reported from India.

337. UROCHELA PULCHRA, Distant.

Urochela pulchra, Dist., Trans. Ent. Soc., p. 356, t. 12, f. 8 (1887).

Body above ochraceous, shadod, and punctured brownish: head and pronotum brownish, margins of pronotum, olivaceous; antenne brownish, second joint longer than the first: scutellum olivaceous, with scattered, coarse, brown punctures, with some mottled markings and a spot in each basal angle of the same colour: corium olivaceous, with large, irregular, coarse, brown punctures on inner area; clavus brown-

ish; membrane brownish, apex paler: body beneath brownish, laterally spotted ochraceous; connexivum ochraceous, spotted black: legs ochraceous, femora speckled brownish: apex of rostrum pitchy (Dist.). Long, 15 mill.

Reported from Sikkim (Rangbi, mihi).

338. UROCHELA FERRUGINEA, Distant.

Urochela ferruginea, Dist., Trans. Ent. Soc., p. 356 (1887).

Body above brownish ochraceous, very thickly and darkly punctate: eyes and two median lines on head, fuscous: antennæ fuscous, 1-2 joints subequal in length, third very short: pronotum with a median longitudinal line and the margins, narrowly luteous: scutcllum with a median longitudinal line, a linear spot at the basal angles, the apox and the margin, narrowly luteous: corium with the margins narrowly, and some longitudinal discal lines luteous: membrane fuscous: connexivum fuscous, with lineate ochraceous spots: body beneath brownish ochraceous, tinged with fuscous, and with fuscous lateral spots, connexivum as above: legs brownish ochraceous, apices of the tibiæ and the tarsi fuscous (Dist.). Long, 12 mill.

Reported from Assam.

Genus Urostylis, Westwood.

Pt. Hope, Cat. Hem., i, p. 45 (1837): Dallas, List Hem., i, p. 313 (1851); Stål, En. Hem., v, p. 117 (1876).

Anteunæ very long and slender, basal joint nearly as long as the head and pronotum taken together: rostrum and pronotum as in Urolabida, Westw.: body less elongated: ocelli present: membrane with seven longitudinal veins: abdomen, in \mathcal{C} , simple, not armed with a foreeps; in \mathcal{C} , terminated by a true, corneous, curved, recurved stylus, bill at the apex.

339. UROSTYLIS PUNCTIGERA, Westwood.

Urostylis punctiyera, Wostwood, Hope, Cat. Hem. i, p. 45 (1837); Dallas, List Hem. i, p. 315 (1851); Walker Cat., Het., ii, p. 411 (1867); Stål, En. Hem., v, p. 116 (1876); Distant, A. M. N. H., (5 s.) iii, p. 45 (1879).

Rufescent-luteous, punctured, above more or less tinted virescent; pronotum with two somewhat large black spots in the middle towards the anterior margin (sometimes absent); hemelytra with a somewhat large black spot in the middle of the corium: antenne fuscous, base of the fourth joint, luteous: body beneath and feet concolorous (Westw.). Body long, 10½ mill.

Reported from Bengal, Nepál, common in Sikkim (mihi), Calcutta.

340. Urostylis gracilis, Dallas.

Urostylis gracilis, Dallas, List Hem., i, p. 315 (1851); Walker, Cat. Hem., ii, p. 411 (1867); Stål, En. Hem., v, p. 116 (1876); Distaut, A. M. N. H., (5 s.) iii, p. 45 (1879).

3. Head impunetate, orange: eyes black: pronotum, scutellum and hemelytra green, rather thickly and finely punctured: membrane semitransparent, brownish: body beneath yellow, legs fulvous; tibiæ pale; tarsi brownish: rostrum testaceous, with the tip black: antennæ, very long and slender; basal joint orange; second greenish; 3—5 joints brownish, the two latter with the base greenish-white (Dallas). Long, 10‡ mill.

Reported from N. India, Sikkim (mihi).

341. UROSTYLIS PALLIDA, Dallas.

Urostylis pallida, Dallas, List Hem., i, p. 315 (1851); Walker, Cat. Het., ii. p. 411 (1867); Stål, En. Hem., v, p. 117 (1876).

Q. Above pale greenish yellow: head brownish: pronotum finely punctured with brown, with the lateral margins waved: scutellam more strongly punctured with brown than the thorax: coriaceous portion of the hemelytra thickly and finely punctured, with the inner and outer portious of the apical margin black, the median portion yellow: membrane transparent whitish, with a black spot in the inner bast angle: body beneath orange: abdomen with the disc smooth and shining, the sides reddish and faintly wrinkled: legs testaceons; femora covered with brown points, which, towards the apex, form a short line on each side: rostrum yellow with the tip black: antenne with the basal joint testaceous; the remainder pale brown (Dallas). Long, 13\(\frac{1}{2}\)—14 mill.

Reported from N. India, Sikkim (mihi).

342. Urostylis notulata, Dallas.

 $\it Urostylis$ notulata, Dallas, Trans., Ent. Soc., (n. s.), ii, p. 16 (1852); Stål, En. Hem., v, p. 117 (1876).

Q. Ovate, pale testaceous: head rather small, triangular, broader than long; impunetate, faintly wrinkled, with a small oblique pit on each side within the cyes; the apex of the lobes and the whole underside of the head, pale yellow; cyes dark brown, occili reddish; antenniferous tubercles, brown: antennæ clothed with very small whitish hairs; the basal joint testaceous, becoming dusky towards the apex and covered with very minute brown punctures; 2-4 joints brown, the last rather paler; rostrum pale yellow with the extreme tip black: pronotum

broader than long, trapezoidal, with the anterior angles rounded off; pale testaceous, rather thickly punctured with brown, with an abbreviated longitudinal red line on the middle of the anterior portion; the disc with a faint transverse furrow or impression before the middle; the portion between this furrow and the anterior margin elevated; beneath testaceous, finely punctured with brown, and with a pale reddish patch within each antero-lateral angle: scutellum testaceous, rather thickly punctured with brown: meso- and meta-notum beneath, pale fulvous, smooth, impunctate, with a large dull, pale-brown patch on each side. Legs clothed with fine whitish hairs: femora yellow-testaceous, covered with fine brown points; tibiæ and tarsi dusky; claws brown: corium testaceous, thickly and rather finely punctured; the punctures pale brown, the apical margin brown, with the median portion yellow: membrane transparent, colourless, with a dark brown spot on the inner basal angle: wings semitransparent, brownish: abdomen above bright red, shining, very finely wrinkled transversely, with a blackish line on each side within the margins: the margins brownish testaceous, edged with brown: abdomen beneath with the disc pale fulvous, flat, shining, finely wrinkled transversely, covered with very minute brown points; the sides red; the margins testaceous (Dallas). Long, $12\frac{1}{3}$ — $13\frac{1}{3}$ mill.

Reported from N. India.

343. Urostylis fumigata, Walker.

Urostylis fumigata, Walker, Cat. Het. ii, p. 413 (I867): var., Distant, Scien. Res., 2nd Yarkand Miss., p. 7 (1879).

Testaceous, fusiform, very finely punctured: head very small: rostrum extending to half the space between the first coxe and the intermediate pair, apex black: antenme nearly as long as the body, first joint almost as long as the pronotum, second much longer than the first, third piecous, a little more than half the length of the second, 4-5 piecous, pale testaceous towards the base, fourth a little shorter than the second, fifth much shorter than the fourth: pronotum with a very slight transverse impression; sides very slightly reflexed, abdomen with large apical appendages; the upper segment lanceolate, armed beneath with two spines: membrane brownish cinereous (Walker). Loug, 9½ mill.

Reported from Silhat, Murree (Marri).

344. UROSTYLIS PHILOIDES, Walker.

Urostylis philoides, Walker, Cat. Het., ii, p. 413 (1867).

Testaceous-green, fusiform, very finely punctured, testaceous beneath:

head small: rostrum extending almost to the intermediate coxe, apex black: antenna a little longer than the body; first joint a little longer than the pronotum, second as long as the first; third black, about half the length of the second, fourth blackish, pale testaceons at the base, a little longer than the second: pronotum with a very slight transverse impression, sides hardly reflexed: scutellum ochraceous towards the tip and with an ochraceous callus on each side at the base; abdomen, in the σ , with very large apical appendages; two long, stout, slightly ascending spines, above which there are two small spines: hemelytra pale green; membrane lurid-cincroous. Distinguished from the preceding by the longer and more slender basal joint of the antennæ and by the protuberances on the scutellum (Walkep). Long, $7\frac{\pi}{3}$ mill.

Reported from Burma.

345. UROSTYLIS LOPOIDES, Walker.

Urostylis lopoides, Walker, Cat. Het., ii, p. 414 (1867).

Testaceous, elongate-elliptical, minutely punctured; punctures brown: head small: rostrum extending to half the space between the first come and the intermediate pair: antenne pubescent, as long as the body; first joint rather stout, as long as the pronotum, second black, testaceous at the base, as long as the first; third black, about half the length of the second; fourth black, whitish for nearly half the length from the base; shorter than the second; fifth whitish, black towards the tip, shorter than the fourth: pronotum with a pale testaceous longitudinal line and with a slight transverse impression, pale testaceous and slightly reflexed on each side and along the fore border; an elongated black point in front of each hind angle: scutellum with a pale testaceous line: legs moderately long and slender: hemelytra with four small brown spots, first and second costal; first uear the base, second at a little before the middle, third on the disc; fourth on the middle of the outer border; membrane lurid-cinereous (Walker). Long, $8\frac{1}{2}-9\frac{1}{2}$ mill.

Reported from India.

346. Urostylis nigromarginalis, Rcuter.

Urostylis nigromarginalis, Reuter, Berlin. Ent. Zeitschr., xxv, p. 85 (1881).

Q. Testaceous, above erectly pallid pilose: pronotum, scutellum, and corium externally sparingly punctured with large impressed ferruginous dots; scutellum with a subtriangular, fuscesent spot towards the base, a little more densely punctured; corium internally and towards the apox very finely and obsoletely concolorously punctured, impressed at the elaval suture with a row of minute dots, clavus also at the

scutellary margin with a row of strongly impressed dots, lateral margin of corium itself thinly black: membrane hyaline-white, interior and basal margins also excurrent streak on apex of membrane, fuscous. Long, 12½ mill.

Rostrum reaching somewhat the middle of the mesosternum: antennæ longer than the body, rufous-testaceous, two first joints with long pallid exserted hairs placed close together, third briefly pilose, last sub-glabrous, first joint subequal in length to pronotum and half the head taken together, second joint almost one-third longer thau first and a little over 21 time longer than third, the third twice shorter than fourth, basal halves of fourth aud fifth, pallid; the fifth shorter than the fourth: anterior lateral margins of pronotum ochraceons, finely serrulate, with long pale hairs, slightly reflexed in the middle: prosternum without a modian ridge (2): mesosternum longitudinally obsoletely subsulcate at the base, equally convex on the disc: feet pallid-pilose, apices of the tibiæ and tarsi, ferruginous: sixth ventral segment, in Q, about two-thirds longer than preceding, apical margin very slightly rounded; dorsal genital lobes seen from above triangular, very slightly rounded ou the exterior margin, interior broadly distant with margin subsinuated, impressed on the disc, inward in the form of an arch, red; seen from beneath, elongate, with the apex acutely rounded, interior margin carinate, ventral lobes turning upwards (Reuter).

Reported from Darjiling.

Genus UROLABIDA, Westwood.

Pt., Hope, Cat. Hem., i, p. 45 (1837); Dallas, List Hem., i, p. 313 (1851); Trans. Ent. Soc. (n. s.) ii, p. 16 (1852); Stål, En. Hem., v, p. 117 (1876). Includes Urostylis, pt., Westwood, l., c., p. 45 (1837); Calliprepes, White, M. N. H., (n. s.) iii, p. 543 (1839); Trans. Ent. Soc. iii, p. 93 (1842);—Typhlocoris, Herr. Schaff., Wanz. Ins. v, p. 79 (1839); ix, p. 175 (1850).

Body elongate-ovate, sleuder, sides parallel, pronotum as broad as the abdomen, posterior angles not prominent: head small, elypens short: ocelli wanting: rostrum hardly reaching, or extending beyond, the intermediate coxw: antenuæ, in the \mathcal{J} , very long, slender, longer than the body, 1-2-4-5 joints of equal longth, the third joint shorter: antennæ in the $\mathcal G$ shorter: hemelytra elongate; membrane with twelve very indistinct longitudinal veins: feet elongate, slender: abdomen, in $\mathcal J$, terminated by two styli bearing a forceps and with a shorter intermediate spine; in the $\mathcal G$, terminated by a curved, corneous, recurved appendage produced almost to half the length of the abdomen or not produced. Type, U. tenera, Westw.

347. UROLABIDA GRAYII, White.

**Calliprepes Grayii, Whito, Mag. N. H., iii, p. 543 (1839); Trans. Ent. Soc., iii, p. 93 (1841—43).

Urolabida Grayii, Dallas, List Hom., i, p. 316 (1851); Trans. Ent. Soc. (n. s.) ii, p. 16 (1851); Walker, Cat. Hot., ii, p. 415 (1867); Stål, En. Hom., v, p. 117 (1876).

Virescent-luteous: pronotum with two posterior triangular dorsal spots, and scutellum with two basal spots, red: membrane with an obscure basal line, coriaceous part with a green transverse line at the apex, oblong-elliptical: head small, with a distinct neck, in front slightly trilobed: antennæ placed on the upper side of the head on a slightly projecting lobe, in front of the eyes which are very prominent; first joint not so long as the head and pronotum, ciliated, cylindrical, rather thickest at the tip: a depression between the eyes which narrows and is continued to the back part of the head, the narrowest part being impressed on the sides, no ocelli: rostrum short, not reaching far beyoud the first pair of legs, apparently 3-jointed, second joint longer than first and third : pronotum semicircular, not so broad as the hemelytra, somewhat truncated behind, in front emarginate and margined as are also the slightly sinuated distinctly ciliated sides: scutellum as long as head and pronotum together, pointed : hemelytra large, reaching beyond the abdomen; the membrane with seven veins, the two interior veins almost united at the base, the two exterior united at the apex : legs slender, hairy; tarsi 3-jointed, first joint as long as the second and third together, claws furnished with pulvilli: abdomen flat above, slightly convex below, margined (White). Distinguished by the genitalia in the 9 being of the ordinary form and not produced into large forceps-like process. Long, $14\frac{3}{4}$; breadth of pronotum, $5\frac{3}{4}$ mill.

Reported from Nepal.

348. UROLABIDA HISTRIONICA, Westwood.

Urostylis histrionica, Westwood, Hope, Cat. Hem., i, p. 46 (1837); Walker Cat. Het. ii. p. 411 (1867).

Typhlocoris semicircularis, Herr. Schäff., Wanz. Ins., v, p. 79, f. 525 (1839). Urolabida semicircularis, Walker, l. c. p. 414.

Urolabida histrionica, Stål, En. Hem., v, p. 117 (1876).

Rufescent luteous, punctured; pronotum and hemelytra tinted virescent; pronotum posteriorly with a testaceous semicircle running through the scutcillum to its apex, sides of pronotum testaceous; a black spot at the apex of the corium in the middle; autenma fuscous, varied with fulvous; body beneath concolorous, feet paler (Westwood). Body, long, 104 mill.

Walker (l. c. supra) describes this species as U. semicircularis, thus:—Ochraceous, fusiform, very finely punctured: head small; rostum extending nearly to the intermediate coxe; antenne blackish, slender, nearly the length of the body, first joint reddish, as long as the pronotum, second a little longer than the first, remainder successively decreasing in length, fifth joint reddish at the base: pronotum with three bright green patches, one in the middle and one on each side of the hind border; sides slightly reflexed: abdomen and posterior legs, ferruginous: fore legs greenish testaceous; tibiæ black aud slightly dilated at the tips; tarsi black at the base: hemelytm with two pale green streaks, and with a deeper green costal streak; an irregular black mark along the outer side; membrane slightly ochraceous; wings pellucid. A variety has the antennæ pale green, joints with blackish tips, first entirely blackish; legs pale greenish testaceous. Distinguished from U. Divotata, chiefly in the length of the antennæ. Long, 10½ mill.

Reported from India, Sikkim (mihi), Calcutta.

349. UROLABIDA TENERA, Westwood.

Urolabida tenera, Westwood, Hope, Cat. Hem., i, p. 45 (1837); Dallas, List Hem., p. 316 (1851); Walker, Cat. Het., ii, p. 414 (1867); Stål, En. Hem., v, p. 117 (1876).

Palely luteous, punctured; pronotum and hemelytra, viroscent-luteous; pronotum posteriorly fulvescent: body beneath, antennæ and fect pallid (Westwood). Long, $14\frac{1}{6}-15$ mill.

Reported from India.

350. UROLABIDA UNILOBA, Stål.

Urolabida uniloba, Stål, En. Hem, v, p. 117 (1876).

σ. Closely allied to *U. tenera*, Westwood, but smaller, antenme shorter, less slender, first joint as long as the pronotum, extremity of the base of the second joint, all the third joint and apical part of the two apical joints, black: genital segment without a lateral process, median process much shorter, gradually narrowed, abruptly recurved from the base, depressed, above with a transverse tubercle almost in the middle, apex bilobed (*Stât*). Long, 10; broad, 4½ mill.

Reported from Darjiling.

351. UROLABIDA BINOTATA, Walker.

Urolabida binotata, Walker, Cat. Het. ii, p. 415 (1867).

Greenish testaceous, fusiform, very finely punctured: head small:

rostrum extending a little beyond the first eoxe, apex black: antenne slender, a little longer than the body, first joint as long as the pronotum, second as long as the first, 3-5 joints black towards the tips, 3 shorter than 4, the fourth shorter than 3, fifth shorter than 4: pronotum transversely impressed in front; sides slightly reflexed: abdomen with two apical lamine: hemelytra with a black longitudinal streak extending from the disc to the outer border of the corium: membrane pellucid (Walker). Long, 10½ mill.

Reported from Silhat.

352. UROLABIDA CHENNELLI, Distant.

Urolabida chennelli, Dist., Trans. Ent. Soc. p. 356 (1887).

Body above reddish ochraceous, marked with black and lutoous: head with the median and anterior portions luteous, the eyes fuscous; first joint of antennæ reddish ochraceous: pronotum with a blackish, diseal, semicircular line, between which and the base the colour is paler and thickly punctured with fuscous; on the anterior dise are two levigate, luteous spots: scutellum luteous with three black basal spots, one median and one at each angle, a large round, reddish-ochraceous spot divided by a median longitudinal luteous line, and the apical area, distinctly punctured fuscous: corium with the inner claval and the apical margins, black, these black lines outwardly and broadly margined luteous, the costal margin of the same colour: membrane pale hyaline: body beneath and legs luteous, apices of the femora beneath, and apices of the tarsi and rostrum, blackish (Dist.). Long, 15 mill.

Reported from Naga Hills (Assam).

353. UROLABIDA KHASIANA, Distant,

Urolabida khasiana, Dist., Trans. Ent. Soc. p. 357 (1887).

Above luteous with reddish-ochraecous markings, a small black spot at each lateral pronotal angle, and two black spots on the apical margin of the corium: head with some reddish ochraecous markings behind the eyes which are blackish; 1-2 joints of the antenne, ochraecous: anterior and lateral margins of the pronotum and transverse bands on dise, also lateral margins of the scutcillum and the corium, reddish ochraecous: lateral, claval and apical margins of corium luteous, last with two distinct black spots: membrane pale hyaline: body beneath and legs, luteous: apex of rostrum, a spot on apices of femora beneath, and apices of tarsi, black (Dist.). Long, 14 mill.

Reported from N. Khasiya Hills (Assam).

Genus EURHYNCHIOCORIS, Reuter.

Berlin Ent. Zeitschr. xxv, p. 84 (1881).

Body oblong, parallel, somewhat flattish; head horizontal, equal in length to breadth with eyes; juga acuminate, almost twice shorter than elypeus, the latter dilated towards the apex, porrect, gene subacuminate at the apex, the superior margin more strongly rounded and a very little longer than the juga, buccular twice shorter than the head, laminately dilated towards the apex, very low at the base: rostrum long, sleuder, reaching almost the apex of the fourth ventral segment, first joint extending beyond the buccule, second a little less than twice longer than the first, third about one-half shorter than second and as long as the fourth joint: first joint of the antenne as long as the head, second almost one-third longer than the first, third twice shorter than second, the prosternum obtusely carinate in the middle, and the mesosternum at the base (Reuler).

354. EURHYNCHIOCORIS SPARSIPUNCTATUS, Router.

Eurhynchiocoris sparsipunctatus, Reuter, Berlin Ent. Zeitschr., xxv, p. 85 (1881).

8. Ferruginous-fuscous, opaque; pronotum somewhat margined at the base by a transversely impressed line, disc obsoletely rugose, irregularly sparingly sprinkled with rather large, impressed, black dots, here and there, however, irregularly formed into black spots : anterior lateral margin very slightly sinuate in the middle, black, testaceous at the basal angles: scutellum with the basal angles, two patches on the dise, and a spot before the apex, black; towards the base, finely and sparingly, towards the apex, strongly and densely, punctured black : clavus with a row of dots here and there abrupt at the scutellary margin; corium with a row of impressed dots at the claval suture and some large black dots close to this suture and many others situate in the exterior area, disc almost impunetate in the middle, several irregular spots on the exterior margin, median spot on the corium and another at the middle of the apical margin, fuscous: membrane fuscous with 6-7 paler veins: peetns with four black-fuscous marginal dots on each side, first in the middle of the side of the prostethinm, second in basal anglo of mesostethium, and two last on the metastethium : dorsum of abdomen red, connexivum testaccous, segments broadly banded black in the middle, spiracula on the venter placed amid black dots, sides of segments here with a median point and more internally a small streak on the basal margin, black (Reuter). Long, 11 mill.

Reported from Silhat.

Sub-fam. Tessaratomina, Stål.

Hem. Afric., i, p. 33, 233 (1864); En. Hem., i, p. 60 (1870);—Edessidae, pt., Dallas, List Hem. i, p. 316 (1851).

- (a) as in sub-fam. Pentatomina (Jour. As. Soc. Ben. pt. II, p. 129, 1887).
- (b.) Spiracula of the basal ventral segment not hidden by the posterior part of the metastethium, sides of the basal segment scarcely shorter than those of the second segment.

Stål makes the following sub-divisions of the Asiatic species:-

Tarsi 3-jointed: antenne 4-jointed, second joint shorter than the two apical taken together: apical margin of corium straight or somewhat rounded: membrane at the base with several areolas emitting longitudinal veins; hamus usually distinct; primary and subtended veins entirely distant: segments of abdomen single.

I. Metasternum much elevated and freely produced forwards: scutellum distinctly produced behind the frena, produced part triangular or spoon-shaped: thorax more or less produced hindwards at base in the middle before the scutellum:—Div. Tessaratomaria.

II. Metasternum simple or elevated, never freely produced forwards: soutellum equilateral, narrowly and slightly produced at the apex behind the frena, rounded or truncated at the apex: thorax not produced posteriorly:—Div. Eusthenaria.

The other divisions are *Oncomeraria* chiefly from Australia; *Prionogastraria* and *Cyclogastraria* from Africa.

Div. Tessaratomaria.

Genus Embolosterna, Stål.

En. Hem. i, p. 66 (1870).

Allied to Tessaratoma Scrv., differs in having the head more acute, perpendicular; eyes larger, coelli nearer the eyes: lateral angles of pronotum cornuted, anterior lateral margins not flattened out, and apical part of scutellum broader. Body large, obovate; head perpendicular, small, triangular, narrow at apex, subacute; lateral margins somewhat straight, juga much longer than the short tylus and contiguous before it; buccula much elevated; eyes large, transverse; ocelli very close to the eyes: antennae short, somewhat slender, first joint on a level with the apex of the head, second joint a little longer than the third, and somewhat shorter than the fourth: pronotum much declined before the middle, posteriorly amplified and produced hindwards, lateral angles produced ontward in a depressed horn, anterior lateral margins somewhat straight,

obtuse towards the anterior margin, not flattened out, posterior lateral margins situate: scutellum somewhat equilateral, apical part behind the frena broad, somewhat equilateral, slightly concave: apical margin of corium straight, rounded towards the exterior apical angle: hamus present: prostethium furrowed, the margins of the furrow somewhat amplified: mesostethium with a rather high ridge, prominulous between the first pair of coxe: metastethium elevated, produced anteriorly in a process which is gradually compressly narrowed, gradually increasing in height forwards, roundly truncated at the apex, and abbreviated between the first pair of coxe, very obtusely sinuated at the base: apical angles of the abdominal segments, acute, prominulous: feet short, rather stout: femora bispinose beneath at the apex: tibis furrowed above (Stát).

355. Embolosterna taurus, Westwood.

Tessaratoma taurus, Westw., Hope, Cat. Hem., i, p. 27 (1837).

Tessaratoma cornuta, Dallas, List Hem. i, p. 342 (1851); Walker, Cat. Het., iii, p. 462 (1868).

Black, very thinly punctured: corium more castaneous: apex of scutellum luteous: sides of pronotum produced on both sides in a very large, obtuse horn: body beneath fuscous-luteous; feet short; femora bispinose at the apex (Westw.). Long, 26-27 mill.

Above chestnut-brown: pronotum anteriorly thickly rugosely punctured, disc moderately punctured and faintly wrinkled transversely: lateral angles produced into broad, blunt horns, convex above and concave beneath; posterior margin much produced over the base of the scutollum of which the apex is broad, golden-yellow: membrane brassy black: body beneath tawny, abdomen opaque with the median ridge and the lateral margins shining, faintly wrinkled: pectus thickly clothed with a fine golden pubescence, with the sutures deep dark brown, legs castaneous; rostrum deep castaneous with the apex black: autennæ pitchy (T. cornuta, Dallas). Long, 29½; exp. hnm. 22 mill.

Reported from Malacca, Ligor, Borneo, China.

Genus Tessaratoma, St. Farg. & Serv.

Enc. Méth., x, p. 590 (1825): Am. and Serv., Hist. Nat. Ins. Hém., p. 164 (1843): Dallas, List Hem., i, p. 340 (1851): Walker, Cat. Het., iii, p. 459 (1868): Stál, Hom. Afric., i, p. 229 (1864); En. Hem., i, p. 68 (1870).

Head somewhat small, triangular, rounded at the apex, flat; the juga longer than the tylus, and anteriorly contiguous; antenniferous tubercles very slightly prominulous, unarmed; bucculæ rather elevated: occlli near the eyes: antenne 4-jointed, short, somewhat stout: rostrum

short, reaching somewhat the middle of the mesosternum, first joint posteriorly extending somewhat beyond the bucculæ: pronotum rather produced posteriorly over the base of the seutellum which is somewhat produced at the apex, hardly covering the interior basal angle of the membrane; frena extended to a distance beyond the middle of the scutellum: the apical margin of the corium rounded towards the exterior apical angle: membrane with several areolas at the base, emitting longitudinal veins: prostethium anteriorly slightly dilated, sinuated behind the eyes, canaliculate in the middle: mesostethium with a robust ridge, furrowed behind the middle: metastethium much elevated, somewhat sinuated posteriorly, produced to a distance anteriorly, the produced part compressly narrowed forwards, extended to the first pair of coxe, touching the mesosternal ridge: second ventral segment elevated in the middle in an obtuse tubercle, and touching the base of the metastethium: feet robust, femora usually spinose beneath at the apex; tibie furrowed above; tarsi 3-jointed (Stål).

356. Tessaratoma nigripes, Dallas.

Tossaratoma nigripes, Dallas, List Hem., i, p. 341 (1851); Walker, Cat. Het., iii, p. 461 (1868); Stål, Ofvers. K. V.-A. Förh., p. 642 (1870); En. Hem., i, p. 67 (1870).

Tessaratoma javanica, var. nigripes, Voll., Faun. Ent. Ind. Néerl. p. 26 (1868),

e. Colour and form of T. papillosa, Drury: head with the margins narrowly edged black: lateral margins of pronotum rounded, broadly reflexed: apex of seutellum broad and rounded, hollowed above and black: abdomen above black, somewhat shining, finely wrinkled transversely, margins dark brown; beneath dull red, somewhat opaque, very thickly covered with minute confluent punctures, with the median ridge, the lateral margins and an irregular interrupted band on each side of each segment deep pitchy brown: pectus spotted black: sternal ridge deep chocolate brown: legs, rostrum and antenne, black (or deep brown), the last long and slender (Dallas). Long, 32-33 mill.

Reported from Java, Philippines, Sikkim (mihi).

357. Tessaratoma malaya, Stål.

Tessaratoma malaya, Stál, En. Hem., i, p. 67 (1870): Distant, A. M. N. H. (5 s.), iii, p. 45 (1879).

9. Ochraecous: antenne, extreme margin of head, rostrum, at least half of the apical part of the scutchlum behind the frenn, spots on the pectus at the coxe, and a large transverse lateral-spot, also the feet, black or fuscous-piecous: dorsum of abdomen subsanguincous: wings fulvescent. Differs from T. javanica, Thunb., in its larger size, and especially in having the metastethial process gradually higher forwards, freely prominulous anteriorly, not quiescent on the sternum, flattened lateral part of pronotum much and gradually rounded, entirely somewhat reflexed: anal valvules, in $\mathfrak P$, as in T. Javanica (Stat). Long, 35; broad, 19 mill.

Reported from Malacca, Ligor, Assam, Sikkim (milii).

358. TESSARATOMA JAVANICA, Thunberg.

Cimex javanicus, Thumberg, Nov. Ins. Spec., ii, p. 145 (1783): Gmelin, ed. Syst. Nat., i (4), p. 2158 (1788): Stoll, Punaises, p. 9, t. 1, f. 2, and larva, t. 38, f 271 (1788).

Tessaratoma javana, Burm., Handb. Ent., ii (i), p. 350 (1835).

Tessaratoma proxina, Westw., Hepe, Cat. Hem., i, p. 27 (1837): Walker, Cat. Het., iii, p. 462 (1868).

Tessaratoma papillosa, Blanchard, Hist. Ins. Hém., p 142, t. 6, f. 2 (1840).

Tessaratoma angularis, Dohrn, Stettin Ent. Zeit., xxiv, p. 349 (1863): Walker, l. c., iii, p. 462 (1868).

Var. a.—Tessaratoma conspersa, Stål, Trans. Ent. Sec., (3. s.) i, p. 595 (1863): En. Hem., i, p. 67 (1870): Walker, l. c., p. 462 (1868): includes stictica, De Haan.

Var. b.—Tessaratoma timorensis, Vellen., 1. c , p. 26, t. 3, f. 4 (1868) : Walker, I. c., p. 464 (1868).

Tessaratoma javanica, Am. and Serv., Hist. Nat. Ins. Hém, p. 16 (1843): Dallas, l. c., p. 340 (1851): Voll., Fanne Ent. l'Arch. Ind. Néerl., iii, p. 25, t. 3, f. 4b (1868): Walker, l. c., 1, p. 461-2 (1868): Stål, En. Hem., i, p. 67 (1870).

Varies in coloration from almost ferruginous to light olive brown, In T. javanica, the anal segment, in &, is truncate at the apex, and the apical angles are rounded: in T. papillosa, the anal segment, in J, is sinuate at the apex and the apical angles acute. In the latter, tho lateral anal valvules, in the Q, are more distinctly sinuate at the apex and less obliquely than in the former; the interior apical angle, too, is acute and tooth-shaped. Thunberg describes this species as :- 'glabrous, luteous, anus obtuse, antennæ and feet ferruginous.' Stoll describes it :antennæ 4-jointed, black; eyes prominent, distinct: margins of pronotum produced forwards, body red-brown with a pectoral spine: feet black. When alive entire body beneath covered with a white powdery substance. above of the colour of Russian leather or hazel, anterior margin of the head weakly emarginate between the lobes: eyes and occlli yellowish or glaucous: antennæ blackish-violet, pilose: lateral margins of pronotum sometimes dilated so far as to form a quadrant: apex of scutellum often brown: beneath, entire body, or some patches on the pectus, sternal and abdominal ridges and the margin of the abdomen of a deep blackish brown, or the entire lower surface of that colour: feet black-brownish or violet (Voll.). The Q is smaller, sides of thorax rounded, a little

dilated towards the posterior angles: antennæ and feet fuscous, body beneath and abdomen above more carneous: anus formed of a single quadrate lobe (*T. proxima*, Westw.). Long, 26 mill. The length apparently varies from 25 to 35 mill.

Var. a:-T. conspersa, Stål, δ . Testaceous-flavescent, rather densely punctured, above remotely and minutely sprinkled fuscous: pronotum rugosely punctured at the anterior lateral margins which are obtusely roundly subangulated in the middle: metasternal ridge somewhat reaching the first coxes: femora bispinose beneath at the apex (Stål). Long, 25; broad, 14 mill. Celebes, Java, Arakan (mihi). In the Arakanese specimen, the entire scutellum is black. Vollenhoven makes the apex of the scutellum and the antennæ black; body beneath hardly more obscure: pectus with some transverse brown patches: feet obscure brown-red.

Var. b:-T. timorensis, Voll.: small; pronotum not dilated, colour hazel, anterior and lateral margins finely rugose: antenuæ and feet obscure, almost black. Timor, Sibságar (Assam).

Reported from E. Archipelago, Malacca, Sikkim, Assam (mihi.).

359. Tessaratoma papillosa, Drury.

Cimez papillosus, Drury, III. Nat. Hist., i, p. 96, t. 43, f. 2 (1770): Wolff, Ic. Cim., i, p. 12, t. 2, f. 12 (1800): China.

Cimes chinensis, Thunb., Nov. Ins. Spec., ii, p. 45, t. 2, f. 59 (1783): Walker, Cat. Het., iii, p. 461 (1868): China.

Cimez sinensis, Gmelin, ed. Syst. Nat., i (4), p. 2158 (1788): Japan, China.

Tessaratoma chinensis, Guérin, Règne An., Texte, Ins. iii, p. 345 (1829-44): Dallas, List. Hem., i, p. 340 (1851); Walker, l. c., p. 461 (1868): China.

Tessaratoma sonneratii, St. Farg. and Sorv., Enc. Méth., x, p. 590 (1825) : Guérin, l. c., Icon., t. 55, f. 4 (1833) : India.

Larva, Tessaratoma ossa-cruenta, Gray, Griffith, An. King., xv, p. 239, t. 46, f. 1 (1832).

Tessaratoma papillosa, Hahn, Wanz. Ins. ii, p. 123, t. 67, f. 204 (1834): Am. and Sey, Hist. Nat. Ins. Hém., p. 16 (1843): Walker, l. c., p. 461 (1868): Stål, En. Hem., j. p. 66 (1870).

Head small, yellowish-olive, eyes of the same colour: antenue black: pronotum yellow-olive, elevated above the level of the head, sides rather projecting at the ligature of the wings: scutellum triangular, terminating in a point near the middle of the abdomen, upper part of it lying beneath the pronotum: hemelytra opaque, yellow-olive; membrane almost transparent; wings yellow-brown: abdomen above dark red, beneath clay-colour, serrulate on the sides, or with a tooth on each segment: anus terminates in two angular points, with a small spine or cornicle on each side: pectus pale clay colour, having a black

spot directly under the fore-legs and another on each side of the intermediate pair: all the legs brown-yellow: rostrum brown (*Drury*). Long, about 25-26 mill.

Flavescent, anus 4-toothed, sternum porrect (Gmelin, l. c.).

Q. Above entirely testaceous: beneath with head and pronotum a little lighter and abdomen a little ferruginous: lateral margins of pronotum almost round, posterior margin truncate, almost straight: sternal process widened, not extending beyond the base of anterior coxes: abdomen dentate on the sides, last segment with four small angles, the two interior formed by an emargination: all femora beneath with two short spines, placed side by side, a little before the tip (T. sonneratii, Serv.). Long, 25-26 mill. Serville observes that he had a specimen of the & in which there was no olivaceous colour, posterior margin of the pronotum yellow, tip of scutellum alone brown: antennæ and feet brown ferruginous. Probably this & belongs to the preceding species. Stål observes that the lateral valvules, in the Q, are distinctly sinuated at the apex and less obliquely so than in T. javanica, the interior apical angle is acute and dentiform.

Reported from China, Java, India. The Indian Museum has specimens from Amoy, Assam, Calcutta.

360. Tessaratoma (?) furcifera, Walker.

Tessaratoma furcifera, Walker, Cat. Het. iii, p. 463 (1868).

Testaceous: head, pronotum and scutellum thickly and very minutely punctured: head obliquely and finely striated on each side, rostrum piecous; antennæ black, second joint a little longer than the third: thorax with the sides piecous, forming two very much rounded angles, posterior angles rounded: scutellum slightly grooved towards the tip which has a black forked spot: pectus partly black, ridge ferruginous, reaching the fore coxæ: abdomen ferruginous, posterior angles of the apical segment, elongated, acute: legs ferruginous: hemelytra thickly and minutely punctured; membrane pale testaceous-cinereons. Thorax diverging directly from the head less than in T. papillosa, sides of thorax almost angular (Walker). Long, 27½ mill.

Reported from Siam.

Genus Siphnus, Stål.

Trans. Ent. Soc. (3 s.), i, p. 597 (1863); En. Hem., i, p. 68 (1870): Walk., Cat. Het. iii, p. 467 (1868).

Body obovate: head rather large, obtusely triangular: antenna 4-jointed: pronotum somewhat produced posteriorly, posterior lateral margins slightly sinuate: scutclium triangular, narrow at the apex: metastethium olevated, produced like a horn forwards: feet short, robust, unarmed. Allied to Tessaratoma, head larger, pronotum not so produced posteriorly $(St\acute{a}l)$.

361. SIPHNUS ALCIDES, Stal.

Siphnus alcides, Stål, Trans. Ent. Soc., (3 s.) i, p. 597 (1863); En. Hem., i., p. 68 (1870): Walker, Cat. Het. iii, p. 467 (1868).

 $\vec{\sigma}$. Yellow-castaneous, shining, hemelytra more obscure: antenne obscurely subsenceous, apical joint weaker towards the apex: lateral margins of pronotum and abdomen, also costal margin of hemelytra anteriorly greenish-breasy: membrane fuscous: pronotum one-fifth shorter than breadth, sparingly, distinctly punctured, anterior margin somewhat sinuate in the middle, lateral margins slightly rounded behind the middle, not reflexed, posterior margin slightly rounded: sentellum sparingly, distinctly punctured: hemelytra finely, remotely punctured (Stål). Long, 31; broad, $16\frac{1}{3}$ mill.

Reported from Cambodia.

362. SIPHNUS HECTOR, Stål.

Siphnus hector, Stål, Trans. Ent. Soc., (3 s.), i, p. 597 (1863); En. Hem., i, p. 68 (1870): Walker, Cat. Het., iii, p. 467 (1868).

J. Narrowly obovate, weakly castaneous, remotely obscurely punctured: scutcillum, antennæ and feet, fuscous-castaneous: apex of two apical joints of the antennæ, apex of scutcillum and basal part of femora, yellow-castaneous: hemelytra castaneous, veins sparingly sprinkled flavescent: membrane fuscous: anterior lateral margins of pronotum, margin of abdomen and irregular, transverse spots on venter, arranged in four rows, subæneous-fuscous. Narrower than the preceding, more densely and more distinctly punctured: pronotum one-third shorter than breadth, anterior lateral margins slightly incrassate, straight, anteriorly very slightly rounded, anterior margin slightly somewhat sinuate in the middle, basal margin somewhat straight (Stål). Long, 29; broad, 15 mill.

Reported from Malacca.

363. SIPHNUS DILATATUS, Walker.

Siphnus dilatatus, Walker, Cat. Het., iii, p. 467 (1868).

Tawny, elongate-oval: head finely and transversely striated; rostrum extending nearly to the intermediate coxæ; tip black: pronotum and scutellum thinly and roughly punctured: pronotum with a very

slight transverse ridge near the fore-border and with a black marginal line extending on each side from the fore-border, to the hind angle which is rounded and prominent: seutellum darker than the pronotum, triangular, acute, abruptly attenuated and slightly furrowed near its tip: pectus testaceous; sterual ridge lanceolate, extending to the first coxes, its posterior extremity concave, contiguous to the broad, round, ventral spine, abdomen blackish: beneath piecous, very thickly and finely punctured, its middle part longitudinally and very minutely striated; hind angles of the apical segment elongated, acute, not extending so far as the appendages, which are acute: legs piecous; fomora tawny at the base: hemelytra piecous, thickly and minutely punctured: wings black (Walker). Long, 38½ mill.

Reported from Siam.

Genus Hypencha, Am. and Serv.

Hist. Nat. Ins. Hém., p. 166 (1843): Stäl, En. Hem., i, p. 68 (1870).

Head rather pointed: antennæ a little longer than in the genus Tessaratoma, with the joints proportionately more slender and not short, stout and incressate: restrum not reaching the insertion of the intermediate feet: pronotum transverse, the posterior angles prominent, though rather rounded; the posterior margin slightly rounded and sinuated, not extending over the base of the seutellum: sternal ridge extended in a point which becomes lower at the insertion of the intermediate feet and advances in the form of a recurved hook, compressed and obtuse, beyond the first pair of feet: sentellum not reaching the middle of the abdomen, its tip canaliculate or spoon-shaped: abdomen oval, not or only very slightly enlarged on each side: feet as in Tessaratoma but the internal or posterior spine at the end of the intermediate and last femora is notably more robust than the external or anterior spine: there are apparently no spines at the tip of the first femora: the other characters as in Tessaratoma (Am. and Serv).

364. Hypencha luctuosa, Stål.

 $Hypencha \ luctuosa,$ Stål, Trans. Ent. Soc., (3 s.) i, p. 596 (1863); Stål, En. Hem. i, p. 69 (1870).

Tessaratoma luctuosa, Walker, Cat. Het., iii, p. 463 (1868).

J. Obovate, subwneous black; above spavingly, distinctly, on hemelytra more finely, punctulate; beneath, densely and finely rugulosely punctured: apical joint of antennæ (except the base), head beneath and meso- and uncta-stethium yellow-testaceous: lateral angles of pronotum hardly prominent. Allied to H. apicalis, St. Farg., but

narrower, lateral angles of pronotum rounded, hardly prominent outwards and in no sense forwards: margins of abdomen immaculate: last femora beneath near the apex armed with two spines (Stál). Long, 28; broad, 15 mill.

Reported from Burma.

365. HYPENCHA APICALIS, St. Fargean & Serville.

Tessarutoma apicalis, St. Farg. and Serv., Enc. Méth. x, p., 591: Burm., Handb. Ent., ii (i), p. 351 (1835): Voll., Faune Ent. l'Arch. Ind. Neérl., iii, p. 26 (1868); Walker, Cat. Het., iii, p. 462 (1868).

Var.—*Hypencha reriki*, Ellenr., Nat. Tijdschr. Ned. Ind., xxxiv, p. 160, f. 30 (1862); Walker, I. c., p. 462 (1868).

Tessaratoma picea, Dallas, List Hem., i, p. 341 (1851).

Hypencha apicalis, Am. & Serv., Hist. Nat. Ins. Hém., p. 166 (1843); Stål, En. Hem., i, p. 68 (1870).

- 2. Deep pitchy brown, shining: last joint of antenne ferruginous, black at the base: membrane bronzed: sides of pronotum dilated, rounded, its posterior margin very little advanced over the scutellum, of which the apex is spathulate: sternal ridge elongate, rising at its anterior part and extending beyond the base of the first pair of coxe: abdomen a little denticulate on the margin, by reason of the posterior angles of the upper segments extending beyond those which follow: last segment with four, almost spinose, angles, the two interior formed by one emargination: all the femora with two spines beneath placed side by side a little before the apex, those of the first pair very short those of the last pair long, like the posterior spine of the middle pair (Sere.). Long, 33-34 mill.
- Var. 2. Shining-black or piceous, with very numerous, small, brassy-green impressed punctures on the pronotum and scattellum; hemelytra violaceous black, varied with purple and cærulean: anterior angle of the pronotum unidentate: abdomen attenuated hindwards, with the margin serrated, posterior teeth longer, curved and arcuate: the posterior angle of the scattellum fuscous-brunneous, with a foveola, containing an intumescence: antenne black, apex of the last joint ochraceous-brunneous: feet piceous: beneath fuscous-black; sternum, neck and face ochraceous (H. reriki, Ellenr.). Long, 28—29 mill.

Reported from Java, Sumatra, Borneo.

366. HYPENCHA OPHTHALMICA, Stål.

Hypencha ophthulmica, Stål, Trans. Ent. Soc., (3 s.) i, p. 596 (1863); En. Hem. i, p. 69 (1870).

Tessaratoma ophthalmica, Walker, Cat. Het., iii, p. 463 (1868).

Q. Distinctly punctured, obscurely ferruginous, tinted subcupreous;

beneath with feet, apex of scutellum and marginal spots on abdomen, sordid testaceous-flavescent: tibin above margined black: eyes large: lateral augles of prouctum somewhat prominent, anterior lateral margins somewhat straight: last femora beneath with two spines at the apex (Stal). Long, 24; broad, 12 mill.

Reported from Ligor, Malacca.

Genus Pygoplatys, Dallas.

List Hem., i, p. 338 (1851): Walker, Cat. Het., i, p. 459 (1868); Stål, En. Hem., i, p. 69 (1870).

Head not broader than long, somewhat pointed in front, scarcely emarginate with the lateral margins plane: antenue 4-jointed, rather stout, basal joint not reaching the apex of the head, second joint longer than the third, fourth about equal to the second: rostrum 4-jointed, reaching the middle of the space between the anterior and intermediate coxe, second joint longest; basal joint very thick, about as long as the fourth, fourth longer than the third : prouotum with the lateral angles produced into broad flat processes, or strong, pointed spines; the posterior margin produced in a semicircle over the base of the scutchum: pectus with a very strong ridge, attached to the metastethium, where it is somewhat pentagonal, deeply cmarginato posteriorly for the reception of the ventral spine, produced auteriorly in a long free spine, reaching far forwards and considerably depressed at its apex; mesostethium with a distinct canal in which the apex of the rostrum reposes : scutellum somewhat obtuse at the apex, distinctly channelled: abdomen oblong, nearly as broad at the apex as at the base, projecting far beyond the hemelytra on each side, with the posterior angles of the apical segment produced; vulvar plates very broad; basal plates received in a semicircular emargination in the middle of the apical sigment of the abdomen; lateral plates transverse, with their apices acute and with a strong tooth in the middle of their posterior margins; median plates united, forming a single, somewhat quadrate piece, widened behind, with two strong spines on its posterior margin and its lateral augles rather acute; there are thus eight teeth in the space between the posterior angles of the abdomen: legs moderate; femora unarmed; tarsi 3-jointed (Dallas).

367. Pygoplatys acutus, Dallas.

Pygoplatys acutus, Dallas, List Hem., i, p. 340 (1851); Walker, Cat. Het., iii, p. 460 (1868); Stål, En. Hem., i, p. 69 (1870).

Pygoplatys roseus, Voll., Faun. Ent. l'Arch. Ind. Néer., iii, p. 24, notc, (1868).

Q. Above pale brown, thickly and rather strongly punctured : pro-

notum with a long, stout, acute spine on each side: margins of abdomen with a brassy-green spot on each segment: body beneath and legs somewhat fulvous; sternal ridge bright fulvous; antenuae pitchy brown (Dallas). Long, 17½; breadth of shoulders, 16½ mill.

Above rosy, except the base of the head and the anterior inclined part of the pronotum which like the body beneath are Inteous: posterior part of pronotum punctured black; lateral horns rather long, turning a little forwards, rounded at the apex, (P. roseus, Voll.). Long, 18 mill.

·Reported from Malacca, Burma.

368. PYGOPLATYS MINAX, Vollenhoven.

Pygoplatys minaz, Voll., Faune Ent. l'Arch. Ind. Néerl., iii, p. 23, t. 3, f. 3 (1868).

2. Above obscurely fulvous, beneath, luteous-ochraceous: head reddish ochraceous; eyes glaucous, ocelli yellow placed on small, black, cuneiform spots; antennæ of a deeper red, pronotum very broad; lateral angles in the form of horns, rather broad at the base, recurved, diminishing in size towards the tip which is obliquely truncated, their colour is of a deeper red than the disc, marked with small black impressed punctures, the rest of the pronotum is indistinctly punctured, except the transverse part near the auterior margin, posterior margin yellowish: scutellum lightly sprinkled with impressed dots, apox channelled: corium very finely punctured, disc paler; membrane hyalinc, colourless: the portion of the abdomen extending beyond the hemelytra is broad, slightly purplish red; the angles of the segments are denticulate and touch almost a submarginal black band: feet and tibiæ with a reddish tinge (Voll.). Long, 19 mill.

Reported from Borneo: Indian Muscum has a specimen from Johore. Possibly P. ralandii, Voll. (l. c.), is only a variety.

Genus Amissus, Stål.

Trans. Ent. Soc., (3 s.) i, p. 595 (1863): En. Hem. i, p. 70 (1870).

Body, large, oval: head subelongate; juga very long, contiguous before the tylus; bucculæ much elevated: occili remote from the eyes: antennæ 4-jointed: posterior margiu of pronotum roundly produced in the middle above the base of the scutellum, which is itself produced at the apex: apical margin of corium straight, apical augle rounded; membraue furnished at the base with many areolas, emitting longitudinal veins: mesostethium elevated, anteriorly somewhat produced and cleft: metastethium slightly elevated, posteriorly very broadly sinuate: second ventral segment slightly clevated and produced at the base in the

middle: feet somewhat short, femora armed with two spines beneath at the apex: last pair of tibie about equal in length to the femora: 1-2 joints of tarsi equally long: allied to Hypencha, Am. & Serv. but structure of head and of sterna different (Stal).

369. Amissus atlas, Stål.

Amissus atlas, Stăl, Trans. Ent. Soc., (3 s.) i, p. 596 (1863); Walker, Cat. Het., iii, p. 466 (1868); Stăl, En. Hem., i, p. 70 (1870).

Q. Fuscous-castaneous: narrow limbus and posterior part of pronotum, apex of scutellum, hemelytra, coxe, trochanters and margin of abdomen, weakly castaneous: antennæ, veins of hemelytra and the tarsi sub-castaneous-yellow: apical angles of abdominal segments, black: pronotum robustly cornuted: head with the sides subparallel, and slightly sinuate in the middle, subtruncate at the apex, more than twice longer than the breadth: second joint of antennæ somewhat longer than the third, but shorter than the apical: pronotum remotely distinctly punctured, posteriorly somewhat smoother, lateral angles obliquely produced forwards in long, depressed, slightly areuate horns; auterior lateral margins crenulated: scutellum remotely, distinctly, punctured, smooth at the apex: hemelytra densely punctured, veins smooth: beneath densely alutaceous (Stål). Long, 41; broad, 19 mill.

Reported from Singapore, Tenasserim.

Div. Eusthenaria (p. 52).

Genus Eusthenes, Laporte.

Ess. Hém. p. 64 (1832); Am. & Serv., Hist. Nat. Ins. Hém., p. 167 (1843); Dallas, List Hem., i, p. 342 (1850); Walker, Cat. Het., iii, p. 467 (1868); Stål, Hem. Afric., i, p. 225 (1864); En. Hem., i, p. 71, 230 (1870).

Head almost squarely truncate at the tip: antennæ rather long: pronotum transverse, lateral margins defined, posterior angles prominent but rounded, posterior margin not extending itself over the scutellum: sternal ridgo not prolonged beyond the intermediate pair of feet and consisting only of a kind of plate placed between those and the last pair, straightly truncate posteriorly, and rounded anteriorly, narrower in the $\vec{\sigma}$: scutellum not reaching the middle of the abdomen, its tip ending in a small, almost square and spoon-shaped, prolongation: four vulvar pieces in $\hat{\varphi}$, square at their tip; and plate, in $\vec{\sigma}$, not near so broad as in Tessaratoma: feet very robust, first pair rather small, intermediate longer; posterior femora much longer and stouter than the intermediate especially in the $\vec{\sigma}$, with a strong hook-like spine at the base; all the femora with two weak spines towards their tips, those of the first pair hard-

ly visible: posterior tibiæ, in σ , strong, curved inside at their base; tarsi strong and large, second joint almost as large as the third $(Am.\S Serv.)$.

- a. First pair of femora beneath near the apex unarmed or furnished on both sides with a small spinule: intermediate femora beneath, near the apex, with a moderate or small distinct spine: mesostethial ridge or wrinkle depressed, often broadly and distinctly furrowed, posteriorly broader, convex and more elevated: metastethium anteriorly narrowed, not however compressed, touching the elevated base of the mesostethial ridge, posteriorly not or but very slightly inflexed: second ventral segment more or less elevated in the middle, usually touching the base of the metastethium.
- b. Feet obscurely piecous or piecous-black: wings usually obscurely fuscous and slightly tinged violaceous.
- c. Tarsi and feet concolorous; spiracula cinctured flavescent. E. robustus, St. Farg., and E. soutellaris, Herr. Schäff.
- cc. Tarsi pale castaneous or yellow-castaneous; wings somewhat violaceous-fuscous.

E. hercules, Stål; E. cupreus, Westwood, E. eurytus, Dist.

bb. Feet, a great part of the first joint of the antennæ and the apex of the scutellum, weakly castaneous: last pair of femora sometimes fuscous-castaneous.

E. voluphemus, Stål.

aa. Fourth joint of the antennæ, yellow-testaceous at the base: wings and dorsum of the abdomen black-violaceous: first pair of femora beneath near the apex, with a somewhat robust spine on the anterior side, with a very minute spinule or unarmed, on the posterior side: middle femora near the apex with a rather large spine on both sides: metastethium anteriorly and posteriorly gradually compressly narrowed: second ventral segment not elevated in the middle, not higher than the first segment: apical angles of the abdominal segments not so prominnlons as in the preceding.

E. sævus, Stål.

370. Eusthenes Robustus, St. Fargeau & Serville.

Tessaratoma robusta, St. Farg. & Serv., Enc. Méth. x, p. 591 (1825).

Oncemeris robustus, Blanchard, Hist. Ins. p. 142 (1840).

Eusthenes elephas, Dohrn, Stettin Ent. Zeit., xxiv, p. 351 (1863); Walker, Cat.

Het., iii, p. 468 (1868).

Eusthenes robustus, Am. & Serv., Hist. Nat. Ins. Hém., p. 167 (1843): Dallas, List Hem., i, p. 342 (1851): Walker, Cat. Het., l. c. p. 463 (1868): Vollenhoven, Faune Ent. l'Arch. Iudo-Néer., iii, p. 27 (1868): Stål, En. Hem., i, p. 71, 230 (1870): Distant, A. M. N. H., (5 s.) iii, p. 45 (1879).

3. Body broad, blackish-brown: autennæ black: pronotum and

seutellum eovered with transverse wrinkles which give it a leathery appearance: apex of seutellum and hemelytra brown-ferruginous: sides of prouotum a little dilated, lateral margins dilated, rounded: abdomen dentate on the margins: anus emarginate: all the femora beneath with two spines, side by side, before the apex; posterior femora long, very stout, having a large, strong and very pointed spine towards their base; tibia very areunte, especially at the base (Serv). The anal plate in the \mathcal{S} is short and almost straightly truncate at the tip: in the \mathcal{S} , the anal plate is bilobed, and also the pronotum is more deeply wrinkled, and the ventral grooves are neither so long nor so deep.

Pronotnia distinctly broader than the base of the hemelytra, anterior lateral margins somewhat dilated, distinctly rounded behind the middle, lateral angles distinctly prominent, obtuse: apieal part of sentellum produced behind the frena, somewhat broadish, subquadrate, obtusely rounded at the apex, flaveseeut-eastaneous: mesostethial wrinkle or ridge posteriorly convexly elevated: the metastethium not pallescent. at least in Q, narrowed somewhat forwards before the middle, behind the middle, first narrowed somewhat hindwards, then furnished with parallel sides, truncated at the base, broader at the base than at the apex: second veutral segment elevated in the middle and touching the metastethium: venter marked obliquely behind the spiracula with a small yellow-castaneous spot: last tibiæ in &, curved; in Q, straight, narrowly furrowed beneath from the base, hardly beyond the middle: last tarsi with the first joint at the apex and second at the base vellowcastaneous: wings obscurely subviolaceous-fuseous: dorsum of abdomen opaque (Stål). Long, 36-46 mill.

Reported from Java, India, Sibsagar (Assam).

371. Eusthenes scutellaris, Herrich Schäffer.

Tesseratoma scutellaris, Herr. Schäff., Wanz. Ins. iv, p. 81, t. 133, f. 410 (1839): Walker, Cat. Het., iii, p. 463 (1868).

Eusthenes minor, Voll., Faun. Ent. l'Arch Indo-Néer., iii, p. 29 (1868).

Eusthenes scutellaris, Stål, En. Hem., i, p. 71, 23I (1870); Distant, A. M. N. H. (5 s.) iii, p. 45 (1879).

Dark eastaneous-brown: head, sentellum, abdomen, antennæ and foet darker, apex of the fourth joint of the antennæ ferruginous: above sparingly punetured: pronotum and sentellum transversely rugose; apex of sentellum narrow, produced: last femora inerassate, having near the base inwards, a very long, somewhat eurved tooth and before the apex two teeth: last tibie stout, areante (Herr. Schäff), & beneath usually of a very obscure brown with a violet tinge, and the ? of a brown-red. Stål remarks that this species differs from E-robustus, Serv., in its smaller

size, pronotum not so broad, auterior lateral margins somewhat straight, or very slightly rounded, apex of scutellum narrower, longer, behind the middle, gradually narrowed, angulated at the apex, mesostethial ridge posteriorly broader and more tunnid, metastethium pallescent, apparently shorter and broader, abdomen especially behind the middle narrower, posterior angles of sixth segment more acute and produced to a greater distance, anal lobes longer and narrower, last pair of feet a little shorter, last pair of femora not reaching sixth ventral segment, first joint of last tarsi shorter, its apex, also base of second joint concolorous, which, however, varies much: wings paler, palely sub-fuscous ochraceous; dorsum of abdomen subviolaceous-shining. Loug, 25-27 mill.

Reported from Java, Sumatra, India, Khasiya Hills (Assam, mihi).

372. Eusthenes hercules, Stål.

Eusthenes Hercules, Stål, En. Hem. i, p. 231 (1870).

Above rufesent piceous; beueath piceous-flavescent; a narrow median band ou the venter, fuscous, spiracula with a pale cincture; scutellum and feet fuscous-piceous, last pair of feet more obscure; tarsi flavescent-castaneous: dorsum of abdomen obscurely somewhat ferruginous, obsoletely punctulate: connexivum subviolaceous-black, basal spot on segments yellow-castaneous: apex of scutellum castaneous.

d. Anal segment amplified hindwards, broadly somewhat truncated at the apex, somewhat sinuated in the middle, posterior angles rounded at the extremity of the apex: apical angles of the sixth segment of the abdomen not so produced, obtuse at the apex itself: metastethium equally narrowed forwards and hindwards from the middle, equally broad at the base and apex, posteriorly slightly inflexed: second ventral segment not elevated in the middle, not touching the metastethium, punctuation as in the other speices of the genus; stature and form of pronotum like E. robustus, Serv.; differs in having the pronotum not broader than the hemelytra, the mesostethial ridge postcriorly very slightly elevated and furrowed almost to the base, the colour of metastethium, of the lower side of the body and tarsi; also the first joint of the last pair of tarsi longer: last tibiæ in &, stout, hardly curved towards the basc, beneath narrowly convex, almost third basal part broadly depressed, gradually uarrowed (Stal). Loug, 39; breadth at base of hem. 20 mill.

Reported from Silhat, Naga Hills (Assam).

373. Eusthenes eurytus, Distant.

Eusthenes eurytus, Dist., Trans. Ent. Soc., p. 358 (1887).

Allied to *E. hercules*, Stål, but smaller, the pronotum much less rounded at the antero-lateral margins, and the lateral angles even less produced than in that species: antennæ entirely black, except the apical joint which is very narrowly ochraceous at the apex: tarsi bright ochraceous (*Dist*). Long, 36; exp. angl. pron. 16 mill.

Reported from India.

374. EUSTHENES CUPREUS, Westwood.

Tessaratoma cuprea, Westwood, Hope, Cat. Hem., i. p. 27 (1837).

Eusthenes cupreus, Dallas, List Hem., i. p. 342 (1851); Walker, Cat. Het., 1, p. 467 (1868); Stal, En. Hem., 1, p. 71,231 (1870); Distant, A. M. N. H., (5 s.) iii, p. 45 (1879).

Castaneous, coppery or brassy, more or less shining; scutellum black: antennæ as long as half the body, first joint very minute, 2-3 joints equal, fourth longer, extreme tip rufescent; posterior femora (σ) long and much thickened, furnished with a long spine before the middle and with teeth towards the apex: pronotum and scutellum more or less deeply transversely furnowed: anal apparatus in σ , formed of two lobes; in φ , quadrilobate (Westw.) Long, 27 mill.

Reported from Nepál, Assam, Sikkim (mihi). N. India, Penang, Siam.

Stâl notes (En. Hem. i, p. 231) that in collections two species are confused, one (long, 24; breadth of hem. 12 millims) known by its smaller size, a little more shining, anterior part of pronotum and the hemelytm at base olivaceous, somewhat enescent, antenne shorter, anterior lateral margins of the pronotum not reflexed, dorsum of abdomen with a large shining brassy-green disc. The other species is larger (long, 29-35; breadth of hem. $14\frac{1}{2}-17\frac{1}{2}$ millims), less shining, pronotum anteriorly more obscure, but scarcely olivaceous or enescent, antenne longer, extreme part of the anterior lateral margins of the pronotum very narrowly reflexed, dorsum of abdomen without a brassy-green disc. The longer of these species is E. cupreus, Westw., and the other is E. theseus, Stâl.

375. Eusthenes theseus, Stal.

Eusthenes theseus, Stál, En. Hem., i, p. 231 (1870).

Characters as noted above under E. cupreus. Westw.

376. EUSTHENES POLYPHEMUS, Stal.

Eusthenes polyphemus, Stèl, Trans. Ent. Soc., (3 s.) i, p. 598 (1863); En. Hem., i p. 72, 232 (1870): Walker, Cat. Het., iii, p. 468 (1868).

 $\vec{\sigma}$, § . Above more or less obscurely ænescent-castaneous; beneath with fect, apex of scutellum, a great part of the first joint of the antenno and small dorsal marginal spots on the abdomen, yellow-castaneous: last pair of femora somewhat fuseous-castaneous. In the §, the metastethium is posteriorly much broader than in the $\vec{\sigma}$, in which the form of the metastethium is very like that of E. hercules, Stål, and also the form of the second ventral and anal segments, but differs in having the mesostethial ridge more elevated and there without a furrow, the last pair of tibie not so stont, and the lower flattened part longer, reaching the middle of the tibie. The last tibiæ, in the $\vec{\sigma}$, are very slightly enved. Differs from E. robustus, Serv., in having the anterior lateral margins of the pronotum, not, unless posteriorly, slightly rounded, lateral angles somewhat more prominulous, the very large spine on last pair of femora and the last pair of tibiæ more curved: the last tibiæ, in $\vec{\sigma}$, are very slightly curved. Long, 33; broad, 17 mill.

Reported from the Dekhan, N. India.

377. EUSTHENES SÆVUS, Stål.

Eusthenes seevus, Stål, Trans. Ent. Soc., (3 s.) i, p. 597 (1863); Walker, Cat. Het., iii, p. 468 (1863); Stål, En. Hem., i, p. 72, 232 (1870).

σ, ♀. Olivaceous-black, slightly turning into ferruginous: beneath with the base of the apical joint of the antenne and the apex of the sentellum, yellow testaceous, hero and there purpurascent and emescent. Smaller than E. robustus, Serv., and longer than E. cupreus, Westw, differs in having the antenne a little stouter, also in the colour of the apical joint of the antenne and of the apex of the sentellum, especially, in having the elevated part of the metastethium narrower posteriorly, and the large spine of the last pair of femora in the σ placed nearer to the base; the other spines on the last femora are fower and smaller than in E. robustus: apical angles of sixth abdominal segment, in σ, somewhat straight, hardly acute: anal segment in σ posteriorly: broadly and obtusely sinuated, posterior angles obtusely rounded (Stål.) Long, 27-30; broad, 13 mill.

Reported from N. China: Dekhan, Sikkim (mihi).

378. Eusthenes antennatus, Distant.

Eusthenes antennatus, Distant, Trans. Ent. Soc., p. 357 (1887).

Head, pronotum and corium purplish brown: legs ochraceous;

sentellum very dark olivaceous with the apex castaneous: membrane shining brassy brown: basal and apical joints of the antennæ ochraceous, the last with the apex blackish, 2—3 joints blackish, base of second joint very narrowly ochraceous: apical joint somewhat longest, 2 very slightly longer than 3: body beneath brownish-ochraceous, or, in some, castaneous: legs castaneous, tarsi very slightly pale: pronotum finely, transversely striate; scutellum more coarsely strate; corium thickly and finely punctate: posterior femora with a long spine and a doublo row of short spines on apical half of the under surface, of which the two last are the longest. The elongate form of the body and the colour of the antennæ distinguish this species which is variable: connexivum generally purplish browu, with a more or less distinct ochraceous spot at the base of the segments (Dist.). Long, 35-36; exp. angl. pron., 12 mill.

Reported from Khasiya Hills (Assam); Nepal.

Genus Eurostus, Dallas.

List Hem., i, p. 342 (1851); Walker, Cat. Het., iii, p. 468 (1868); Stål, Hem. Afric., i, p. 225 (1864); En. Hem., i, p. 72 (1876).

Head longer than broad, narrowed in front, with the apex slightly emarginate: antenne 4-jointed, second joint longer than the third, fourth about equal to the second: rostrum 4-jointed, scarcely reaching the middle of the mesostethium, second joint longest, 3-4 nearly equal, shorter than the first; pronotum with the lateral angles unarmed, posterior margin not produced: scattellum, short, not reaching the middle of the abdomen; the apex small and rounded, somewhat spoon-shaped: abdomen unarmed at the base: sternum without a ridge: legs stout; the four anterior femora with two spines beneath close to the apex, last pair much incrassated (3), with a very long acute spine near the base, two shorter ones near the apex, and a double row of minute spines, or acute tubercles, running along the under surface (Dallas).

379. EUROSTUS VALIDUS, Dallas.

Eurostus validus, Dallas, List Hem. i, p. 343, t. 11, f. 2 (1851); Walker, Cat Het. iii, p. 468 (1868): Stâl, En. Hem. i, p. 72 (1870).

c. Elongate-ovate, deep chestnut, punctured: head finely rugose: pronotum minutely punctured, faintly transversely rugose, with the anterior and lateral margins, black: sentellum coarsely rugose, with the disc finely, the margins coarsely, punctured; with the lateral margins and the tip blackish: conium rather paler than the rest of the surface, very thickly and minutely punctured: membrane brownish, semitrans.

parent: margins of abdomen black: the abdomen beneath, smooth and shining, impunctate, tinted with violet; stigmata yellowish: pectus violet-black, strongly wriukled; prostethium castaneous with a violet-black, wrinkled patch; sternum pale: legs pitchy castaneous, slightly shining, with numerous minute tubercles; tarsi paler: rostrum eastaneous, with the tip black: autenne black; apical joint bright orange, with the base black (Dallas). Long, 30-31 mill.

Reported from China, India (?).

380. Eurostus grossipes, Dallas.

Eurostus grossipes, Dallas, List Hem., i, p. 343 (1851): Walker, Cat. Het., iii, p. 468 (1868): Stål, En. Hem., i, p. 72 (1870): Distant, A. M. N. H. (5 s.) iii, p. 45 (1879).

Head, pronotum and seutellum opaque, pitchy, with a greenish tinge: pronotum faintly wrinkled transversely, with a leathery appearance; lateral margins narrowly edged with brown: scutellum coarsely wrinkled, with the whole surface also finely wrinkled and sparingly punctured; the apex much hollowed, impunctate, dull orange: coriaceous portion of the hemelytra deep pitchy brown, opaque; membrane, pale brown, opaque: margins of the abdomen of the same colour as the pronotum with a dull orange band at the base of each segment: abdomen beneath dull violet, opaque, with the lateral margins and the obtuse median ridge, pale fulvous brown: pectus dull violet, wrinkled, with the margins and the sternum brown: legs pale fulvous brown; posterior femora very stout: rostrum brown: antenne with the basal joint brown, second black, extreme tip of fourth joint slightly ferruginous (Dallas). Long, 35-36 mill.

Reported from Assam, Sikkim (mihi).

Genus Mattiphus, Am. & Serv.

Hist. Nat. Ins. Hém., p. 168 (1843); Dallas, List Hem., i, p. 344 (1851); Walker, Cat. Het., iii, p. 468 (1868); Stil, Hem. Afric. i, p. 225 (1864); En. Hem., i, p. 72 (1870).

Pronotum dilated laterally, transversely quadrate, anterior angles long, rather pointed, anterior margins slightly roundly emarginate: sternum with a rather narrow ridge, very distinct, situate between the intermediate and last pair of feet: abdomen not or scarcely extending beyond the hemelytra on each side: the other characters as in Pycanum (Am. & Serv.).

MATTIPHUS LATICOLLIS, Westwood.

Eusthenes laticollis, Westw., Hope, Cat. Hem., p. 27 (1837). Java.

Mattiphus carrenoi, Am. & Serv., Hist. Nat. Ins. Hém., p. 168 (1843). India.

Mattiphus laticollis, Dallas, List Hem., i, p. 344 (1851); Walker, Cat. Het., iii, p. 468 (1868); Stål, En. Hem., i, p. 72 (1870). Malacca.

Castaueous, shining: pronotum transverse, quadrate: scutellum castaneous-black, extreme tip whitish: antennæ blackish, apices of joints, white: sides of abdomen, black, immaculate: body beneath, with feet, luteous: abdomen shining brassy, sides with a row of transverse black lines (Westw.). Long, 27 millims.

Reported from Java, Iudia, Malacca.

381. Mattiphus oblongus, Dallas.

Mattiphus oblongus, Dallas, List Hem., i, p. 344 (1851): Walker, Cat. Het., iii, p. 468 (1868): Stål, En. Hem., i, p. 75 (1870).

σ, 2. Abovo brilliant brassy green, generally becoming dull pitchy brown after death: pronotum transverse, quadrate, with the anterior angles rather less than right angles, the anterior margin nearly straight, with a small median emargination for the reception of the head; the lateral margins also nearly straight, the posterior margin gently rounded; the surface of the pronotum is faintly wrinkled transversely and minutely punctured: scattellum transversely wrinkled, and rather thickly and finely punctured: margins of the abdomen projecting beyond the hemelytra on each side, especially at the apex; the posterior angles of the apical segment very prominent, acute, making the apex of the abdomen apparently truncated, and giving an oblong form to the whole body: body beneath golden yellow: legs pale fulvous brown: autenuæ darker, with the tip of the third and base of the fourth joints yellow or orange; the remainder of the fourth joint black (Dallas). Long, σ 25; 9, 27 mill.

Reported from N. Iudia. The Indiau Museum has specimens from Assam.

382. Mattiphus æruginosus, Stål.

Mattiphus aruginosus, Stål, Trans. Ent. Sec., (3 s.) i, p. 600 (1863); En. Hem., i, p. 73 (1870): Walker, Cat. Het., iii, p. 469 (1868).

Joval, above brassy-green, punctulate; pronotum transversely slightly rugose, behind the middle and the hemelytra inwards, turning into ferruginous: beneath with feet, the extremity of the apex of the sentellum, apex of third and base of fourth joint of the antenne, also small marginal spots on the abdomen, testaceous-flavescent: pectas and venter shining golden purplish: femora unarmed. Stature of *Pycanum rubens*, Fabr., nearest to *M. reflexus*, Dallas, from the Philippines, distinct in having the lateral margins of the pronotum straight from the apex beyond the middle, thence obtusely roundly angulate, antenne stouter, and marking otherwise (S/dl). Loug, 21; broad, 11 mill.

Reported from Ceylon.

Genus Asiarcha, Stal.

En. Hem., i, p. 73 (1870).

Body oval: head somewhat short, equally long and broad between the eyes; juga contiguous, rounded at the apex, lateral margins straight: ocelli scarcely twice as far from the eyes as from each other: rostrum reaching the intermediate coxe: second joint of the antennæ longer than the third: sides of pronotum dilated: abdomen gradually slightly narrowed hindwards, apical angles of segments acute, a little prominulous, angles of sixth segment altogether prominulous hindwards, in &, acute: prostethium furrowed: mesostethium with a longitudiual furrowed ridge or wrinkle: metastethinm elevated, anteriorly and posteriorly, narrowed, higher than the base of the mesostethium: first ventral segment elevated in the middle in a tubercle, tonching the base of the metastethium: feet moderate, femora beneath with two rows of very minute teeth, last pair armed inwards near the apex with a largish spine: last tibiæ somewhat straight, as long as the femora. Near Mattiphus, Am. & Serv., differs in having the head shorter, more obtuse, the structure of the sterna, the angles of the last abdominal segment in & acute, produced, and the first ventral segment elevated in the middle (Stål).

383. ASIARCHA NIGRIDORSIS, Stål.

 $\it Mattiphus nigridorsis, Stål, Trans. Ent. Soc., (3 s.) i, p. 600 (1863): Walker, Cat Het., iii, p. 469 (1868).$

Asiarcha nigridorsis, Stål, En. Hem., i, p. 73 (1870).

σ, ♀. Above black, obsoletely verging into ferruginous, beneath with antenne and feet testaceous-flavescent; extreme margin of venter black, the fourth joint of antennæ, black, flavescent at the base, the third joint (except apex) infuscate: membrane greenish æneous. Allied to M. oblongus, Dallas, but differs in being larger, above black: prouotum more amplified forwards, lateral angles more produced, smaller, part of anterior margin reflexed, posterior angles of sixth abdominal segment produced more acutely and a little farther. Head obtuse, about as long as the intraocular breadth; pronotum gradually distinctly amplified for-

wards, lateral angles distinctly produced forwards: posterior angles of sixth abdominal segment acute (Stål). Long, 29; broad, 15 mill.

Reported from India, Panjab.

Genus CARPONA, Dohrn.

Stettin, Ent. Zeit., xxiv, p. 851 (1863): Stäl, En. Hem., i, p. 74 (1870). Includes Virbius, Stål, Hem. Afric., i, p. 225 (1864).

Form of the pronotum as in Dalcantha dilatata Am. & Serv., the lateral margins are produced in the form of an equilateral triangle with the apex on a level with the eyes: form of the abdomen is very like that of Pygoplatys, Dallas, and entirely different from Dalcantha, Am. & Serv., moreover the metastethium is unarmed, which distinguishes it from Pygoplatys; likewise the abdomen is not prolonged in a thorn or spino; the last femora are a little thicker than the others and the apex of each femur has two teeth: first joint of the antennæ not reaching beyond the level of the head (Dohrn).

384. CARPONA ANGULATA, Stål.

Pycanum angulatum, Stål, Trans. Ent. Scc., (3 s.) i, p. 601 (1863): Walker, Cat. Het., iii, p. 471 (1868).

Virbius angulatus, Stål, Berlin Ent. Zeit., p. 158 (1868). Pycanum smaragdiferum, Walker, l. c., p. 472 (1868).

Carpona angulata, Stål, En. Hem., i, p. 74 (1870).

Q. Subreneous-black, beneath fuscous-ferruginous, tinted brassy-green: small marginal spots on abdomen yellow-testaceous: sides of pronotum angulated, amplified, angles turned forwards, anterior margin of the lateral dilated part sinuate, lateral margins subparallel: femora beneath with two spines near the apex: last tibiæ distinctly curved (Stat). Long, 32; broad, 16 ½ mill.

Reported from Siam.

385. CARPONA FUNESTA, Dohrn.

Carpona funesta, Dohrn, Stettin Ent. Zeit., xxiv, p. 351 (1863); Walker, Cat. Hot., iii, p. 474 (1868): Stěl, En. Hom., i, p. 74 (1870).

Obscurely black-piceous, opaque, very finely and densely punctured: head strongly rugose, juga somewhat exarcuate, tylus shorter; eyes and ocelli brownish, the latter of a lighter colour: first joint of the antenne extending somewhat beyond the head, second joint about four times as long as the first: lateral margins of head, margins of gular plates, and base of second joint of rostrum light brown-yellow: anterior margin of pronotum is semilunately emarginate, and ends on each side in a yellow

protuberance; here also the somewhat exarcuate fore border separates from the lateral borders in a rather equilateral produced triangle which approaches the other side of the lateral margins in a rounded pointed angle of about 75°: humeral angles rounded and with the posterior half of the pronotum and the strongly rugose scutellum shining, the anterior half of the pronotum and the corium are dull: membrane dark brown with a metallic lustre: beneath dull piccous-brown, the margins of each part of the pectus, two spots in the middle of the mesostethium, the margin of the corium and a spot on the base of the margin of each abdominal segment light yellow brown: feet dark piceous-brown with prominent beaded edges. Very like C. angulata, Stål, and hardly specifically different: it is however, distinguished by the pronotum being more opaque, dilated part more finely and more densely rugulose, venter finely and densely punctulate, apical angles of pronotum ochraceous at the apex, prominulous in a tooth to the eyes, anterior margin of lateral dilated part of pronotum straight, at anterior angles only not entirely gradually sinuate, juga less narrowed towards the apex, there more rounded outwards. Long, 34 mill.

Reported from Cambodia.

386. CARPONA AMPLICOLLIS, Stål.

Pycanum amplicolle, Stål, Trans. Ent. Soc., (3 s.) i, p. 600 (1863); Walker, Cat. Hot., iii, p. 470 (1868).

Carpona amplicollis, Stål, En. Hem., i, p. 74 (1870).

Q. Black, minutely rugulose, punctulate, beneath turning into ferruginous; pronotum transverse, lateral angles produced forwards, stature almost that of M. oblongus, Dallas, pronotum proportionately broader, more dilated forwards and the lateral angles more produced: 2 and 4 joints of antennae of equal length, third somewhat longer: pronotum gradually somewhat amplified from the base forwards, then abruptly forming on both sides an angle somewhat produced forwards: sentellum more distinctly punctured than the pronotum: beneath very densely, finely rugulosely punctulate: femora beneath near the apex armed with two spines, the interior spine on the last femora robust: last tibine slightly curved behind the middle (Stål). Long, 32; broad, 18 mill.

Reported from N. India.

387. CARPONA AMYOTI, Vollenhoven.

Pycanum amyoti, Voll., Tijdsch. voor Ent., (2 s.) i, p. 219, t. ii, f. 7 (1866); Fauno Ent., PArch. Indo. Néer, iii, p. 34, t. 3, f. 8 (1868); Walker, Cat. Het., iii, p. 471(1868). Carpona amyoti, Stål, En. Hem. i, p. 74 (1870).

Of a deep cherry-brown, a little lightor beneath: antennæ black, tip

yellow: eyes light brown, ocelli yellow: pronotum dilated, disc finely transversely rugose and irregularly punctured: scutellum distinctly rugose, its apex lighter: hemelytra very finely punctulate, the margin obscure near the base: membrane transparent brown: rostrum, marks on the pectus, the coxæ, and the reflexed margin of the hemelytra, yellowish: some small triangular white patches on the lateral margins of the abdominal segments; the sixth segment is acuminate in both sexes, the 4-6 segments a little dilated in the 2: fect stout, with long spines on the femora (Voll.). Scarcely differs from the preceding, compared with Vollenhoven's figure it differs in having the angles of the dilated part of the pronotum produced much more forwards than in *O. angulata*, Stål. Long, 32; broad, 19 mill.

Reported from India (?), Sumatra (?).

Genus PYCANUM, Am. & Scrv.

Hist. Nat. Ins. Hém., p. 171 (1843): Dallas, List Hem., i, p. 345 (1851): Walker, C. Het., iii, p. 470 (1868): Stål, Hem. Afric., i, p. 225 (1864): En. Hem., i, p. 75 (1864).

Head rather pointed, anterior margin slightly emarginate: antennee long, joints rather robust, the first searcely extending beyond the anterior margin of the head, the rest almost canaliculate, the second a little larger than the third which is as long as the fourth: rostrum reaching the middle of the space lying between the insertion of the first and that of the second pair of feet; pronotum semilunate, rather regularly rounded in front, posterior border almost straight and not produced over the scutellum, lateral margins flat and a little reflexed: no sternal ridge: scutellum rather broad at the base, but short, not reaching the middle of the abdomen; its apex very small, extended a little in form of a long square and its tip spoon-shaped: abdomen oval, margins flattened and almost foliaceous, extending on each side a little beyond the hemelytra: venter tunnid: base not elevated: feet moderate; femora beneath with two more or less prominent spines at the apex (Am. § Serv.).

388. PYCANUM RUBENS, Fabricius.

Cimes rubens, Fabr., Ent. Syst., iv, p. 107 (1794); Stoll, Panaises, p. 21, t. 4, f. 25, 29 (1788).

Cimex amethystinus, Weber, Obs. Ent., p. 115 (1801). Edessa amethystena, Fabr., Syst. Rhyng., p. 150 (1803).

Edessa rubens, Fabr., Syst. Rhyng., p. 151 (1803).

Tessaratoma alternata, St Farg. & Serv., Enc. Méth., x, p. 591 (1825).

Aspongous amethystinus, Burm., Haudb. Ent., ii (1), p. 351 (1835); Herr. Schäff., Wanz. Ins., iv, p. 85, t. 135, f. 417 (1839); Blanchard, Hist. Ins., p. 143 (1840).

Pycanum amethystinum, Am. & Serv., Hist. Nat. Ins. IIém., p. 172 (1843); Dallas, List Hem. i, p. 345 (1851); Walker, Cat. Het., iii, p. 470 (1868).

Dinidor amethystinus, Herr. Schäff., Wanz. Ins., vii. p. 76 (1844).

Fycanum rubens, Vollenhoven, Faune Ent. P'Arch. Indo-Néer., iii, p. 32 (1868); Stàl, Hem. Fabr. i. p. 40 (1868); En. Hem. i. p. 75 (1870); Distant, A. M. N. H., (5 s.) iii, p. 45, 52 (1879).

Antennæ pilose, black, last joint a little rufescent at the apex: head greenish, shining, blackish at the apex: pronotum ruddy, anterior and lateral margins virescent: scutellum greenish, shining, with a flavescent spot on the apex: hemelytra ruddy, spotless: wings obscure: ahdomen reddish, last segment greenish and the margin spotted vellow: feet black (C, rubens, Fabr.). Head with the margin a little reflexed: juga wrinkled at their base, brown-violaceous above: antennæ hlack, briefly pilose; apex of the last joint slightly brownish: eyes brown, ocelli lighter: pronotum of a semicircular form, not dilated, red-hrown, transversely rugose, especially posteriorly, its lateral margins reflexed : scutcllum of the same colour, transversely rugose, apex yellowish; hemelytra concolorous, very finely punctulate, interior and exterior margins transversely rugose: membrane nacreous brown: the portion of the abdomen extending beyond the hemelytra has alternate yellow and black hands: body heneath ochraceous, mottled with light hrown and a little violet: feet brownish, more obscure above. Long, 12-16 mill,

Var. a. Light yellowish brown above: borders of head and the antenne violet grey: venter a little more violet than the type. Sumatra.

b. Rather obscure brown violet: head and anterior margin of pronotum with a dull green reflection: beneath motified with light brown, violet and bronzy green: margin of abdomen with square alternate yellow and violet spots. Sumatra.

c. Obscure brown violet: head, anterior margin of pronotum and the scutellum of a dull green: below of a beautiful violet, with ochraceous patches: feet black. Banca, Biliton: a variety of P. amethystinus Fabr. and found in Assam (mihi).

d. Blackish violet: posterior margin of pronotum and posterior half of hemelytra, bronzed green: pectus brown violet; venter very deep violet, spotless; feet brown. Sumatra.

e. Head, pronotum and scutellum of a brilliant green: hemelytra cherry-red: entire body below golden green with brownish-yellow patches: margin of abdomen yellow with patches of an obscure brown: femora red: tibies deep brown. Malacca (Voll.).

In Assam and Sikkim the representatives of this species are usually of an uniform ochraceous colour above.

Reported from the East. Arch., Assam, Sikkim (mihi).

389. PYCANUM PRETIOSUM, Stål.

Pycanum pretiosum, Stål, Œfvers. K. V.-A. Förh., p. 234 (1854); l. c., p. 64, t. 1 a, f. 2 (1850); l. c., p. 645 (1870); En. Hem. i, p. 75 (1870); Walker, Cat. Hat. iii, p. 471 (1868).

Pronotum, scutellum and hemelytra obscurely sanguineous, violacescent: beneath violaceous, sanguineous: anterior part of head violaceous green, rugulosely punctured; autence black, fulvescent at the extreme apex, last joint much longer than the preceding: pronotum broadly truncate anteriorly, sinuate behind the head, sides oblique, somewhat straight, rugosely punctured, anteriorly and with two basal spots, metallic green: scutellum rugosely punctured, green at the base on both sides, luteous at the apex: hemelytra at the apex virescent, rather finely punctulate: membrane cupreous: pectus and abdomen on both sides varied green, its margin above and below luteous, spotted black: feet obscurely fuseous, castaneous; femora spinose at the apex. Long, 26; broad, 14 mill. Reported from Penang. Hardly differs from P. rubens, and should belong to variety (d); only a slight dissimilarity in the form of the pronotum and the length of the third joint of the antenne.

390. Pycanum ponderosum, Stål.

Pycanum ponderosum, Stål, Œfvers. K. V.-A. Förh., xi, p. 234 (1854); l. c. xiii, p. 63, t. 1 a, f. 1 (1856); Walker, Cat. Het. iii, p. 471 (1868): Stål, En. Hem, i, p. 75 (1870).

Dalcantha Sancti Fargavii, Voll., Tijdschr. Ent., (2 s.) i, p. 218, t. 11, f. 6 (1866).

Q Sordid luteous above and beneath, scutellum and hemelytra luteous; rugosely punctured: head triangular, subcmarginate at the apex, margined black: antennæ black, fulvescent at the extreme tip: pronotum transverse, equally broad, anteriorly and postcriorly, sinuate behind the head, dilated anteriorly on both sides, rugulosely punctured, except the basal margin, very narrowly margined black: scutellum rugosely punetured, more weakly luteous at the apex: hemelytra densely punctured; membrane sordid hyaline; beneath with three large patches on both sides of the pectus, one on both sides on the abdomen, oblong, broad, much sinuated inwards, metallic green: abdomen above with black marginal spots: feet obscurely castaneous, femora spinose at the apex (Stál). Long, 33; broad, 18 mill. Differs from P. rubens, Fabr., in being larger and stouter and in the longer last joint of the antennæ; the pronotum, moreover, is rectangular, dilated anteriorly on both sides. The D. Sancti Fargavii, Voll., is luteous, head and sides of pronotum margined black: abdominal limbus spotted fuscous, antennæ, black. Long, 28-35; broad, 20-21 mill.

Reported from Silhat, Assam, Damdim (mihi).

391. Pycanum jaspideum, Herrich Schäffer.

Pycanum jaspideum, Herr. Schäff., Wanz. Ins., ix, p. 308, t. 323, f. 1009 (1852); Walker, Cat. Het., iii, p. 470 (1868): Stål, En. Hem., i, p. 75 (1870).

Æneous-cupreous, beneath and feet obscurely testaceous: like P. rubens, Fabr., antenne longer and thinner, second joint much longer than the third; first joint brown yellow, apex of third and base of fourth joint, white yellow: lateral margins of the pronotum strongly reflexed, ventricosely advanced, its surface and that of the scutcllum strongly transversely rugose: feet and beneath brown-yellow without a metallic lustre: the incisures of the margin of the abdomen alone yellowish (H. S.). The color of the feet and marking of the antennæ in this species would place it in Mattiphus, but the spined femora bring it into Pycanum. Long, 25 mill.?

Reported from Assam.

392. PYCANUM (?) RUBIDUM, Walker.

Pycanum rubidum, Walker, Cat. Het., iii, p. 471 (1868).

Deep red: sides of head and pronotum, antennæ, legs and costa of the hemelytra, at the base, black: head thickly and very minutely punctured, obliquely striated on each side in front; eyes testaceous; rostrum tawny; second joint of antennæ a little longer than the third, fourth much longer than the second: pronotum transversely and finely striated, minutely and rather thinly punctured, sides slightly rounded, obliquely striated: seutellum less finely striated than the pronotum: pectus and underside of the abdomen metallic-green: luteous spots on each side of the abdomen, femora blackish red: hemelytra very thickly and minutely punctured, membrane lurid. Pronotum more dilated than in P. rubens, possibly only a variety (Walker). Long, 27¼ mill.

Reported from Mount Ophir,

393. PYCANUM (?) STABILE, Walker.

Pycanum stabile, Walker, Cat. Het., iii, p. 472 (1868).

Dark dull red: sides of the head and of the pronoturn, legs and costs of the hemelytra, at the base, black: head extremely minutely punctured, with an encous tinge: rostrum piceous: pronotum transversely and finely striated, minutely and rather thinly punctured; fore part nearly smooth; sides in front longitudinally striated, dilated and forming two rounded right angles: soutellum less finely striated than the pronotum: pectus metallic green; lobes mostly bordered with tawny; abdomen with black lateral spots, underside with two very broad me-

tallic green stripes; disc longitudinally and very finely striated: hemelytra extremely minutely and thickly punctured, partly and slightly tinged with æneous-green; membrane cinereous (Walker). Body long, 32-33 mill.

Reported from India: appears to be intermediate between P. ponderosum, Stål, and Carpona angulata, Stål, (Siam).

394. PYCANUM (?) PALLIPES, Walker.

Pycanum pallipes, Walker, Cat. Het., iii, p. 473 (1868).

Blackish green, pale luteous beneath: head, pronotum and scutellum very thickly and minutely punctured: head pale luteous behind, and with an interrupted stripe of that hue: cyes pale luteous, with ferruginous disc: antennae luteous; second joint more or less brown above; third brown, yellow towards the tip, much shorter than the second; frourth black, yellow towards the base, a little shorter than the second: pronotum with a very narrow luteous border, transversely and finely striated; fore part on each side much dilated, longitudinally striated, forming a well defined right angle: scutellum transversely rugulose: abdomen above purple; connexivum deep green, bordered with brown, and, at the tip, with pale luteous: hemelytra blackish, irregularly red about the borders; membrane emerald green: wings blackish cincreous (Walker). Body long, 25 mill.

Reported from N. India. Walker notes that it appears to be a link between Pycanum and Dalcantha, and is close to D. stålii, Voll.

Genus Oxylobus, Stål.

En. Hem., i, p. 75 (1870).

Body ovate: head small, gradually somewhat sinuately narrowed before the eyes; juga contiguous, rounded at the apex; occili twice as far from each other as from the eyes: rostrum reaching middle of mesostethium: antenne 4-jointed, fourth joint longer than the second: sides of pronotum dilated: prostethium longitudinally sulcate: mesostethium with a depressed, continued ridge or wrinkle, furrowed through its entire length: metastethium not elevated: abdomen gradually amplified hindwards, angles of segments acute, very slightly prominulous, sixth segment very broad, apical angles acute, produced to a distance: basal segments of venter not elevated in the middle: feet moderate; tibiæ straight; last pair somewhat equal to femora in length: differs from Pycanum in the shape of the abdomen (Stål).

395. OXYLOBUS NIGRO-MARGINATUS, Stål.

Pycanum nigro-marginatum, Stål, Trans. Ent. Soc., (3 s.) i, p. 601 (1863): Walker, Cat. Het., iii, p. 470 (1868).

Dalcantha servillei, Voll., Tijds. voor Ent., (2 s.) i, p. 220, t. 11, f. 9 (1866). Oxylobus nigro-marginatus, Stål, En. Hem., i, p. 75 (1870).

J. Pale subolivaceous flavescent, or virescent; above remotely distinctly, on the hemelytra a little more densely and more finely punctured, beneath densely and minutely rugulosely punctulate: narrow lateral margins of the pronotum, costal margin of hemelytra towards the base, apex of apical angles of last segment of the abdomen, also its lateral margins, black; membrane vitreous; antennæ corulean-black towards the apex. Head somewhat longer than the intraocular breadth, obtuse at the apex : second joint of the antenne longer than the third, shorter than the apical: pronotum as in M. laticollis, Westw., broadly rounded at the base, gradually somewhat narrowed from the base forwards, thence anteriorly on both sides forming abruptly a right angle, rounded at the apex: abdomen gradually somewhat amplified towards the apex, apical angles of last segment acutely, obliquely produced hindwards to a distance, diverging: first femora unarmed, posterior femora with a distinct spine on the posterior side beneath towards the apex (Stal). Long, 20; broad 10 mill.

Reported from Tringani, Malacca.

Genus DALCANTHA, Am. & Serv.

Hist. Nat. Ins. Hém., p. 170 (1843): Dallas, List Hem., i, p. 345 (1851): Walker, Cat. Het., iii, p. 473 (1868): Stål, Hem. Afric., i, p. 225, 230 (1864); En. Hem., i, p. 76 (1870).

Head short, somewhat broad; juga longer than the tylus, anteriorly contiguous, obtuse at the apex, lateral margins posteriorly rather deeply sinuated: antenniferous tubercles not prominulous, unarmed; bucculæ rather elevated, reaching the base of the head: ocelli remote from the eves: rostrum short, first joint extending somewhat beyond the bucculæ posteriorly: pronotum posteriorly broadly rounded: scutellum small, triangular, subequilateral, slightly produced at the extreme apex; frena extended almost to the apex of the scutellum; membrane at the base with many areolas, emitting longitudinal veins: prostethium anteriorly scarcely dilated, furrowed in the middle: mesostethium furnished with an obtuse, somewhat furrowed, ridge, or with two parallel ridges : metastethium not elevated: venter unarmed at the base, not elevated: feet moderate, somewhat robust, femora sometimes spinose at the apex beneath; tibiæ prismatic, above furrowed: tarsi 3-jointed (Stål). Differs little from Mattiphus and Pycanum except in the shorter and broader head.

396. DALCANTHA DILATATA, Am. & Serville.

Dalcantha dilatata, Am. & Serv., Hist. Nat. Ins. Hém. p. 171 (1843); Dallas, List Hem., i, p. 345 (1853); Walker, Cat. Het., iii, p. 473 (1868); Stål, En. Hem. i, p. 76 (1870).

9. Head, pronotum, scutellum and hemelytra of a deep green above, thickly and finely punctured or tuberculated: pronotum edged brown ou the sides, on the disc with two red elongate rings pointing towards the external margin: lateral margins and apex of the scutellum, of a reddish yellow; membrane and wings, transparent nacreous, yellow-greenish: abdomen above of a vellow-red, the lateral dilatations brown-reddish, marked with some yellowish lines: body beneath yellow, mottled with brownish: feet yellowish: antennæ black, first joint yellowish, tip of the fourth joint sulphur yellow (Am. & Serv.). Long, 27 mill.

Reported from India.

397. Dalcantha Stålii, Volleuhoven.

Dalcantha Stålii, Vollenhoven, Tijdschr. v. Ent. Ned. Ind., (2 Ser.) i, p. 220, t. 11, f. 8 (1866); Stål, En. Hom., i, p. 76 (1870).

Dalcantha regia, Walker, Cat. Het., iii, p. 474 (1868).

Purplish or fuscous black above, testaccous or luteous beneath with margins infuscate: head, pronotum and hemelytra, extremely minutely and thickly punctured: head finely and obliquely striated on each side in front: eyes testaceous; disc piceous: antennæ black, first joint tawny, testaceous beneath; third hardly longer than second; fourth testaceous towards tho tip, shorter than the second: pronotum, fore part excepted, transversely and very finely striated, the fore part dilated. very slightly angular ou each side: scutcllum transversely and minutely rugulose, pale yellow at the tip: abdomen widening from the base to the fourth segment where it extends much beyond the hemelytra; 5-6 segments much narrower: membrane brown; pronotum less dilated than in D. inermines, from which it differs also in the femora having two spines near the tips (Walker). Long, 25; breadth of abd. at base, 12; in fourth segment, 18 mill.

Reported from Silhat, Sibságar (Assam).

398. DALCANTHA INERMIPES, Stål.

Dalcantha inermipes, Stål, Trans. Ent. Soc., (3 s.) i, p. 599 (1863); Walker, Cut. Het., iii, p. 473 (1868); Stål, En. Hem., i, p. 76 (1870).

J. Above obscurely ferruginous-meeous, beneath with feet and costal limbus of hemelytra from base almost to middle, testaceousflavescent, sparingly varied ferruginous; median longitudinal line on venter and antennæ (the yellow-testaceous basal joint excepted), black. Allied to *D. dilatata*, Am. & Serv., differs in having the prouotum a little shorter, lateral part more dilated and rounded, antennæ more sleuder and femora unarmed (Ståt). Long, 20; broad, 10 mill.

Reported from the Punjab.

The following genera and species require further examination before admitting them to the Asiatic list.

Div. ONCOMERARIA. Stål.

Tarsi 3-jointed: apical margin of corium more or lcss distinctly sinuate, very rarely rounded: membrane without basal arcolas, transverse basal vein emitting longitudinal veins: scutellum longer than broad, part placed far behind the frena: primary and subtended veins of wings approximate or contiguous, diverging towards the apex: hamus wanting.

Geuus Piezosternum, Amyot & Scrville.

Hist. Nat. Ins. Hém., p. 161 (1843) Pallas, List Hem., i, p. 338 (1851); Walker, Cat. Het., iii, p. 437 (1868); Stál, Hem. Afric, i, p. 224, 227 (1864); En. Hem., i, p. 63 (1870). Includes Salica, Walker, l. c. p. 469 (1868).

Body large, obovate: head small triangular; juga longer than the tylus, and anteriorly coutiguous; anteuuiferous tubereles entirely visible from above, very close to the eyes, a little prominulous, nuarmed; buccules continuous, much elevated, higher in front than behind; eves rather prominulous; ocelli near the eyes; antennæ 5-jointed, shortish, rounded. first joint extending beyond the apex of the head, second longer than the third; rostrum extending beyond the first pair of eoxæ, first joint extending a little beyond the bucculæ posteriorly: lateral margins of pronotum very narrowly reflexed, basal part produced hindwards and covering base of scutchlum which is triangular, longer than broad, acute at apex; frena extended beyond the middle of the scutellum; apical margin of corium sinuate, exterior apical angle acute: membrane with simple longitudinal veins, emitted from the transverse basal vein, prostethium simple: metastethium much elevated, posteriorly truucate, anteriorly produced, the produced part gradually compressly narrowed forwards, extended to the first coxe, quiescent on the mesostethium : apical angles of the abdominal segments prominulous in a tooth; second ventral segment somewhat elevated in the middle at the base and touching the truncate postcrior part of the metastethium: feet moderate last pair distant; femora unarmed; tibiæ slightly furrowed above; tarsi 3-jointed (Stål). From America and Africa.

399. Piezosternum (?) firmatum, Walker, Cat. Het. iii, p. 458 (1868). Piezosternum cribratum, Walker, l. c., ?,?.

Testaceous, elongate-oval, paler beneath: head minutely punctured: rostrum extending rather beyond the first coxe; antenne piceous, second joint longer than the third: pronotum and scutellum thinly and roughly punctured: pronotum with an irregular smooth band near the fore border, sides transversely striated, lateral angles produced into horns which are as long as half the intermediato space, slightly inclined forwards and ascending, with black punctures towards the tips which are slightly acute: hind border rounded, extending over the base of the scutellum which is attenuated, acute, pale-greenish and slightly grooved near the tip: pectoral ridge lanceolate extending to the first coxe: abdomen narrowly bordered black, hind angles of the apical segment form ing two spines which extend a little beyond the eight intermediatespines: hemelytra rather thinly and roughly punctured with a blackishpatch on the disc: membrane pale cinereous (Walker). Body long, 14-15 mill. P. cribratum is a little smaller, horus more inclined forwards and scutellum smaller.

Reported from Malacca.

400. Piezosternum (?) ingenuum, Walker, Cat. Het. iii, p. 459 (1868).

Testaceous: head minutely punctured; rostrum extending a little beyond the first coxe, tip black; antenne luteous, less than half the length of the body, 2-3 joints about equal in length, fourth longer than the third: pronotum and scutellum thirdly and roughly punctured, minutely and transversely striated along each side; horns directly diverging, with blackish punctures, rounded at the tips, longer than their breadth at the base; hind border rounded, extending over the base of the scutellum which is acute, grooved and much attenuated towards the tip: the pectoral ridge lanceolate, extending to the first pair of coxe, notched at the base: hind angles of the apical segment of the abdomon clongated, acute, not extending beyond the anal appendages: hemelytra very thickly and minutely punctured, with variable rosy patches: membrane pale cinereous (Walker). Body long, 19 mill.

Locality not given (Malacca ?).

Genus Muscanda, Walker.

Cat. Het. iii, p. 576 (1868).

Body nearly elliptical, thickly and rather roughly punctured: head small, conical in front, a little longer than broad; juga contiguous much beyond the tylus; eyes prominent; rostrum stout, extending to the first coxe; antenne slender, a little more than half the length of the body first joint extending to the front of the head, second a little shorter than the third, fourth much longer than the third, fifth shorter than the fourth: pronotum with a slight transverse ridge between the horns which are broad, slightly tapering, truncated at the tips, slightly ascending, extending obliquely forward, about half the length of the intermediate breadth of the pronotum; a transverse callus on each side in front: scutellum a little less than half the length of the abdomen, attenuated towards the apex which is rounded: pectus without a ridge; abdomen without a ventral spine: legs rather long and slender: membrane with longitudinal veins some of which are fuscate. Distinguished from Piezosternum, A. & S., by the long horns of the thorax and the much less acute soutellum (Walker).

401. Muscanda Testacea, Walker.

Muscanda testacea, Walker, Cat. Het. iii, p. 577 (1868).

Testaceous including eyes: abdomen thinly punctured on the disc beneath, where there are black points along each side on the hind angles of the segments: membrane cinereous (Walker). Body long, 21 mill.

Reported from Darjiling.

Genus Bessida, Walker.

Cat. Het. iii, p. 577 (1868).

Body elongate-oval, thickly and somewhat roughly punctured: head longer than broad, narrow and rounded in front; juga contiguous much beyond the tylus; eyes small, not prominent: rostrum extending to the first coxe; antenne slender, about one-third of the length of the body; first joint not extending to the front of the head, second very much longer than the third, fourth longer than the third, fifth a little longer than the fourth: pronotum with a small slight transverse ridge between the horns which are stout, acute, very slightly inclined forwards and not longer than their breadth at the base; transverse callus on each side near the fore border; sides straight, slightly serrate: scutellum attenuated, rounded at the tip, more than half the length of the abdomon which is truncated at the tip: legs moderately long and stout (Walker).

402. Bessida scutellaris, Walker.

Bessida scutellaris, Walker, Cat. Het., iii, p. 578 (1868).

Ferruginous, ochraceous beneath: antennæ, scutellum, abdomen

and logs och raccous: membrane lurid (Walker). Body long, $12\frac{1}{2}\text{-}13$ mill.

Reported from Burma.

Subfam. DINIDORINA, Stål.

En. Hem. i, p. 79 (1870); Ofvers. K. V.-A. Förh. (3), p. 32 (1872):—*Edessidw*, pt., Dallas, List Hem. i, p. 316 (1851): *Dinidorida*, Stål, Ofvers. l. c. p. 522 (1867).

a, b, as in Subfam. Pentatomina (Jl. Pt. II, p. 192, 1887).

(c)—Scutollum never extending boyond the middle of the dorsum of the abdomen, apical part broad: hemelytra and wings usually complete, rarely abbreviated: membrane very large: primary and subtended veins of wings distant, converging at the apex, the space between not amplified there.

Genus Cyclopelta, Amyot & Serville.

Hist. Nat. Ins. Hém., p. 172 (1843) ; Dallas, List Hem., i, p. 346 (1851) ; Walker, Cat. Het., iii, p. 477 (1868) ; Stål, En. Hem., i, p. 80 (1870) :—Includes *Dinidor*, Stål, (acc Latr.), Hem. Africo, i, p. 81, 211 (1864).

Head rather broad, but small, almost straightly truncated and slightly emarginate in front; juga longer than the tylus; eyes small, prominulous; ocelli very distinct: antenne rather long, 4-jointed, rather flattened; first joint short, though extending a little beyond the anterior margin of the head, second longer than the third which is a little shorter than the fourth: rostrum reaching the insertion of the middle pair of feet: pronotum almost semicircular anteriorly, the posterior margin slightly rounded: scutellum scarcely reaching the middle of the abdomen, its apex broad and lunately rounded: membrane with irregular areolas formed of transverse and longitudinal voins, not extending beyond the apex of the abdomen: the abdomen broad, rounded prosteriorly, margins flat and extending on each side beyond the hemelytru; feet moderate, rather robust: femora with some spines beneath towards the apox (Am. § Serv.).

403. Cyclopelta obscura, St. Farg. & Serville.

Tessaratoma obscura, St. Farg. & Serv., Enc. Méth, x, p. 592 (1826). Java.
Aspongopus atternans, Westwood, Hope, Cat. Hem., i, p. 26 (1837).
Aspongopus depressionnis, Horr. Schäft., Wanz. Ins., iv, p. 85, t. 135, f. 418 (1830)

Dinidor depressicornis, Herr. Schäff., l. c., vii, p. 76 (1844).

Cyclopelta obscura, Am. & Serv. Hist. Nat. Ins. Hém., p. 173 (1843); Dallas, List Hem., i, p. 347 (1851); Walker, Cat. Het. iii, p. 479 (1868); Vollenhoven, Faune. Ent. PArch. Indo-Néer., iii, p. 37 (1868); Stål, En. Hem. i, p. 30 (1870); Ofvers. K. V.-A. Förh., p. 645 (1870); Distant, J. A. S. B., xlviii (2), p. 37 (1879): Lethierry, An. Mus. Gen., xviii, p. 649 (1883).

Q. Body entirely dull brown mingled with shades of reddish;

antenne black: abdomen scarcely denticulate on the lateral margins, upper border black with red patches, lower, red with black patches: femora with two small spines placed side by side near the apex and others along them (Serv.). A. depressicornis, Herr. Schäft, is described as:—Fuscous, ovate; above very flat, coriaceous, coarse, dark red-brown, dull; fore-border of pronotum and both the humeral protuberances smoother, redder: antenne 4-jointed, 2-3 joints depressly dilated: spots at base and apex of scatellum and on the connexivum, orange: venter convex, smoother, sordid orange varied brown: feet castaneous.

This species varies much in colour: sometimes blackish, sometimes obscurely ferruginous, beneath paler, sometimes ferruginous-flavescent; connexivum and ventral limbus marked with ferruginous or yellow-ferruginous spots: basal spot on the scutellum distinct [sometimes absent]. Long, 14-15 mill.

Reported from Assam, Sikkim (mihi), Calcutta, Madras: China, Philippines, Malacca, Java, Borneo.

404. CYCLOPELTA TRIMACULATA, Vollenhoven.

Cyclopelta trimaculata, Voll., Fanne Ent. l'Arch. Ind. Néerl, iii, p. 37, t. 4, f. 4 (1868); Stål, En. Hem., i, p. 80 (1870).

Black-purplish: a small line or oblong spot on the side of the pronotum, triangular spot at base of scutellum united by a median line with a spot on the apex and two submarginal streaks on venter, yellow: rostrum, feet and border of counexivum, red (Voll.). Probably only a local variety. Long, 13-16 mill.

Reported from Malacca, Borneo.

405. Cyclopelta tartarea, Stål.

Cyclopelta tartarea, Stål, Ofvers. K. V.-A. Förh., p. 234 (1854); l. c. p. 64 (1856); Walker, Cat. Het., iii, p. 480 (1868): Stål, En. Hem. i, p. 80 (1870): Distant, A. M. N. H. (5 s.) iii, p. 45 (1879).

J. Entirely blackish or subcupreous blackish above, coriaceous, punctured, transversely rugose: sometimes a minute sanguineous spot at the base of the scutellum: membrane fuscous ochraceous: beneath black, somewhat shining æruginose. Differs from C. obscura, only in having the connexivum concolorous, neither broadly red, nor spotted black, and in the feet being more obscure. Long, 15; broad, 9 mill. Reported from Himálaya, Bombay, Ceylon, very common in Sikkim (milhi). Long, 10-11 mill. I have an entirely black small species from Vizagapatam and Dehra Dun. On the whole, the links between these three species are rather fairly established, and the two latter may be

considered local varieties. The uniform blackish variety being more common in India and those with yellow spots on pronotum, scutellum and connexivum being more common in Burma and southwards.

Genus Aspongopus, Laporte.

Ess. Hém., p. 58 (1832); pt. Am. & Serv., Hist. Nat. Ins. Hém., p. 173 (1843); Hers. Schäff, Wanz. Ins. vii, p. 77 (1844); Dallas, List Hem. i, p. 348 (1851); Walker, Cat. Het., iii, p. 480 (1868); 1843, Hem. Afric. i, p. 81, 212 (1844); En. Hem. i, p. 81 (1870). Includes, Spangepodium, Spinola, Ess. Hém., p. 305 (1837):—Amacosia, Spin., Gen. Ins. Artr. p. 118 (1852):—Peltagopus, Signeret, A. S. E. F. (3 s.), viii, p. 396 (1861).

Body oval or ovate: head small, subfoliaceous, juga sometimes a little longer than the tylus; bucculæ much elevated, foliaceous, subsemicircular: rostrum extended almost to the intermediate coxe, first joint extending beyond the bucculæ: antennæ 5-jointed: lateral angles of prouotum not prominent, obtuse: apical part of scutellum, broad: frena extended to or a little beyond the middle of the scutellum: veins of membrane more or less anastomosod: venter unarmed at the base; feet robust, femora often spinulose (Stál).

Stål distributes the species of this genus amongst the subgenora Colpoproctus and Aspongopus. The first is found in Africa, the second in India, and is distinguished by having the head subequilateral or scarcely transverse, the lateral margins straight or slightly sinuated, the eyes not stylated: the anal segment, in \mathcal{T} , is entire at the apex, rounded, and is rarely furnished with an obsolete sinus in the middle.

406. Aspongopus Brunneus, Thunberg.

Cimes brunness, Thunberg, Nov. Ins. Spec., ii, p. 45 (1783); Gmelin, ed. Syst. Nat., i. (4), p. 2158 (1778).
A. (Aspongopus) brunneus, Stål, En. Hem. i. p. 82 (1870); Distant, A. M. N. H.

(5 s.), iii, p. 45, 52 (1879).

Above brunnoous, beneath fuscous, antenne pilose (*Thunb.*): closely allied to and frequently confounded with *A. obscurus*, Fabr., it is thus differentiated by Distant (l. c.).

Abdomen above red.

Third joint of the autonne, a little longer than the second, brunneus Thunb.

Abdomeu above black.

Second and third joints of the anteunæ equal. Fabr. Long, 16-17; broad, 10 mill.

obscurus,

Reported from India, Assam,

407. Aspongopus obscurus, Fabricius.

Cimea obscurus, Fabr., Ent. Syst., iv. p. 107 (1794).

Edessa obscura, Fabr., Syst. Rhyrg. p. 151 (1803); Welff. Ic. Cim., p. 177, f. 171 (1811).

Aspongopus obscurus, Burm., Handb. Ent., ii (i), p. 352 (1835); Herr. Schäff., Wanz. Ins., vii. p. 80 (1844); Dallas, List Hem., i. p. 349 (1851); Walker, Cat. Het., iii, p. 482 (1868): Vollen., Faune Ent. l'Arch. Inds. Néerl., iii, p. 38 (1868): Stål, Hem. Fabr., i, p. 38 (1868).

A. (Aspongopus) obscurus, Stål, En. Hem. i, p. 82 (1870).

Body, wings and feet, fuscous: pronotum, hemelytra and scutellum obscurely olivaceous: head and antenna (except the yellow last joint) black: anterior margin of pronotum fuscous: scutellum more obscure at the base: margins of abdomen obsoletely spotted yellow (Fabr.).

? Yellow-castaneous, shining somewhat cupreous, densely punctured: antennæ black, last joint yellow-testaceous: margins of pronotum concolorous: upper and lower marginal spots on the abdomen, castaneous-flavescent: dorsum of abdomen testaceous: wings sordid yellow, violaceous-fuscous at the apex (Ståt). Long, 17; broad, 9\frac{3}{2} mill.

Reported from Australia, Celebes, Aru, Bouru, Java, India, Ceylon, N. Bengal, Silhat, Pondicherry: Assam (mihi), Sikkim (mihi), Calcutta.

408. Aspongopus janus, Fabricius.

Cimes Janus, Fabr., Syst. Ent., p. 714 (1775); Spec. Ins., ii, p. 357 (1781); Mant. Ins., ii, p. 295 (1787); Gmelin, ed., Syst. Nat., i (4), p. 2152 (1788); Fabr., Ent. Syst., iv. p. 107 (1794); Wolff, Ic. Cim., i, p. 13, t. 2, f. 13 (1800); Stoll, Punaises, p. 30, t. 6, f. 41 (1788).

Cimex afer, Drury, Ill. Nat. Hist., iii, p. 66, t. 46, f. 7 (1782).
Cimex surinamensis, Gmelin, ed. Syst. Nat., i. (4), p. 2134 (1788).
Edessa Janus, Fabricius, Syst. Rhyng., p. 151 (1803).

Pentatoma Janus, St. Farg. & Serville, Enc. Méth., x, p. 56 (1825). Aspongopus vicinus, Westwood, Hope, Cat. Hem., i, p. 25 (1837).

Aspongopus Janus, Lap., Ess. Hém. p. 58 (1832); Burm., Handb. Ent. ii (i), p. 352 (1835); Am. & Serv., Hist. Nat. Ins. Hém., p. 173 (1843); Herr. Schäff., Wanz. Ins., vii, p. 78, t. 240, f. 747 (1844); Dallas, List Hem., i, p. 348 (1851); Walker, Cat. Uct. iii, p. 482 (1868); Distant, A. M. N. H., (5 s.) iii, p. 45 (1879).

A. (Aspongopus) Janus, Stal, En. Hem., i, p. 83 (1870).

Head deep black, immaculate: pronotum rufous, anterior segment black, elevated margin rufous: scutellum black, rufous at the apex: hemelytra rufous; wings black: abdomen black with the elevated margin, rufous: feet black (Fabr.). A. vicinus, Westw., differs only in the smaller size and the rufescent colour being more luteous. Long, 16 mill.

Reported from Philippines, Java, Borneo, Siam, India, N. Bengal,

Assam, (mihi), Tranquebar, Bombay, Karachi (mihi), Trivandrum (mihi).

409. Aspongopus ochreus, Westwood.

Aspongopus ochreus, Wostw., Hope Cat. Hem., i, p. 25 (1887): Walker, Cat. Het., iii, p. 483 (1868): Stål, En. Hem., i, p. 85 (1870): Distant, A. M. N. H., (5 s.) iii, p. 45, 52 (1879).

Entirely luteous-ochraceous: pronotum and seutellum transversely rugose: antennæ and feet fuscous: last joint of antennæ and tarsi pale: body beneath concolorous (Westw.). Long, 17-18 mill.

Roported from Bengal.

410. Aspongopus siccifolius, Westwood.

Aspongopus siccifolius, Westw., Hope, Cat. Hem., i, p. 26 (1837): Stål, En. Hem., i, p. 85 (1879): Distant, A. M. N. H. (5 s.) iii, p. 45 (1879).

Cyclopelta siccifolia, Dallas, List Hem., i, p. 347 (1851): Walker, Cat. Het., iii, p. 479 (1868).

Obscurely coppery-fuscous, very much punctured; antennæ short, apical joint pale; membrane luteous-fulvous, irregularly reticulated with concolorous veins; pronotum transversely subfoveolate; first femora denticulate beneath (Westw.). Body long, 14½-15 mill.

Reported from Ceylon, India, Gogo, N. Bengal, Assam.

411. ASPONGOPUS NIGRIVENTRIS, Westwood.

Aspongopus nigriventris, Westw., Hope, Cat. Hem., i, p. 26 (1837); Dallas, List Hem., i, p. 349 (1851); Walker, Cat. Het., iii, p. 482 (1868); Vollenhoven, Faune Ent., Parch. Indo-Néerl., iii, p. 39 (1868); Stål, En. Hem., i, p. 85 (1870); Distant, A. M. N. H., (5 s.), iii, p. 45 (1879).

Altogether black-fuscous, above just tinted with cupreous, very finely punctured: pronotum transversely substriated: membrane with about twelve longitudinal voins of which some are forked: last tibiae, a little dilated in the middle (Westw.). Long, 17-18 mill. A. chinensis, Dallas (List 1. c.), differs almost only in having the second joint of the antenne much longer than tho third and may perhaps be united with this. σ , long, 17-18; φ , long, 18-19 mill.

Reported from China, Borneo, Sulu, India, Silhat, Assam, Sikkim (mihi).

412. ASPONGOPUS SANGUINOLENTUS, Westwood.

Aspongopus sanguinolentus, Westwood, Rope, Cat. Hem., i, p. 26 (1887); Dallas, List Hom., i, p. 350 (1851); Walker, Cat. Het., iii, p. 483 (1868); Stål, En. Hem., i, p. 85 (1870).

Closely allied to A. nigriventris, Westw., differs especially in having

the abdominal margin sanguineous, last tibiæ simple, and the veins of the membrane less regular and more forked (*Westw.*). Long, 14-15 mill. Reported from India, Java.

413. ASPONGOPUS FUSCUS, Westwood.

Aspongopus fuscus, Westwood, Hope, Cat. Hem., i, p. 26 (1837); Dallas, List Hem., i, p. 349 (1851); Walker, Cat. Het., iii, p. 483 (1868); Stål, En. Hom., i, p. 85 (1870); Öfvers. K. V.-A. Förh., p. 645 (1870).

Closely allied to A. sanguinolentus, Westw., and perhaps only a variety of that species; colour more piecous, and interrupted on the luteous sides of the abdomen by black dots; membrane with more areolas at the base (Westw.). Long, 15\(\frac{1}{2}\)-16 mill.

Reported from Java.

414. ASPONGOPUS NEPALENSIS, Westwood.

Aspongorus nepalensis, Westwood, Hope, Cat. Hem., i, p. 26 (1837); Dallas, List Hem., i, p. 349 (1851); Walker, Cat. Het., iii, p. 483 (1868); Stål, En. Hem., i, p. 85 (1870); Distant, A. M. N. H. (5 s.), iii, p. 45 (1879).

Allied to but much longer than A. nigriventris, Westw., altogether fuscous-piecous: membrane concolorous with about 12 veins, some of which are forked and areolated at the base: sides of the pronotum almost straight (oblique); last tibiæ a little dilated before the middle (Westw.). Long, 18-19 mill.

Reported from Nepál, Silhat, Assam, common in Sikkim (mihi).

415. Aspongopus unicolor, Dallas.

Aspongopus unicolor, Dallas, List Hom., i, p. 349 (1851); Walker, Cat. Het., iii, p. 480 (1868); Stål, En. Hem., i, p. 85 (1870).

Q. Closely resembles A. obscurus, Fabr., entirely fuscous except the black antennæ: body beneath paler than the upper surface: legs brown, posterior tibiæ dilated before the middle and with a long oval pit on the dilated portion: antennæ black with the basal joint brown. Long, 16½-17 mill.

Reported from India?

416. ASPONGOPUS MARGINALIS, Dallas.

Aspongopus marginalis, Dallas, List Hem., i, p. 350 (1851): Walker, Cat. Het., iii, p. 483 (1868): Stål, En. Hem., i, p. 85 (1870).

σ. Black piccous, somewhat obscure: pronotum and scutellum very thickly and minutely punctured and faintly wrinkled transversoly:

Reported from Teuasserim.

417. ASPONGOPUS CIRCUMCINCTUS, Walker,

Aspongopus circumcinctus, Walker, Cat. Het., iii, p. 483 (1868).

Aeneous-black, thickly and very finely punctured, brassy-piceous beneath: eyes piceous: rostrum tawny: antenne black, second joint a little longer than the third; fourth longer than the second; fifth a little shorter than the fourth: sides of pronotum and of abdomen, testaceous, deeper on the latter: pronotum and scutellum transversely and very slightly striated, the latter piceous at the tip: corium piceous, membrane lurid (Walker). Long, 15-16 mill. Allied to A. Mülleri, Voll., (Java), but differs in the dark colour of the head and of the under-side of the body and is probably only a local variety.

Reported from India.

418. ASPONGOPUS NIGRO-AENEUS, Reuter.

Aspongopus nigro-aeneus, Reuter, Ent. Mon. Mag. xvii, p. 234 (1881).

Entirely brassy-black: head, pronotum and scutellum densely and finely punctured, obsoletely transversely rugose: sides of head distinctly sinuate: second joint of the antenne a little over half longer than the first, 2-3 compressed, third longer than the second: apical margin of the corium slightly rounded: prostethium triangularly impressed in the middle, margins of impression scarcely reflexed. Differs from A. ochreous, Westw., in the colour, the impression on the prostethium, being less deep, the deuser punctuation, and the faint wrinkles (Reuter). Long, 16\(\) mill.

Reported from Siam.

Genus Megymenum, Laporte.

Ess. Hém., p. 52 (1832): Boisd., Voy. Astrolabe, Ins., ii, p. 632 (1835): Guérin, Voy. La Coquille, Ins., ii, p. 171 (1838): Stâl, Öfvors. K. V.-A. Förh., p. 522 (1867): En. Hem., i, p. 86 (1870). Includes:—Psendaradus, Burm., Silb. Rev. Ent., ii, p. 19 (1884): Amaurus, Burm., Nov. Act. Acad. Leop. xvi, Suppt. p. 294 (1834): Platydius, Westw., Zool. Journ. v., p. 446 (1835).

Head large or somewhat so; juga much longer than the tylus and

contiguous before it: antennæ 4-jointed, 2-3 joints much compressed: mesostethium deeply furrowed: bucculæ much elovated, rounded: spiracula of the first ventral segment visible.

Stål distributes the species of this genus amongst the subgenera Pseudaradus, Megymenum, Anoplocophala and Pissistes. The two first are found in India, the third in the Eastern Archipelago and the last in China.

Pseudaradus:—Head with the sides tumid at the eyes, unarmed: pronotum anteriorly with a tubercle in the middle: lateral margins of the abdominal segments distinctly produced posteriorly in a lobe or tooth; prominulous before the middle, or almost in the middle, in a tooth, or small very obtuse lobule; 2-3 joints of antennæ amplified on both sides.

Megymenum:—Head furnished before the eyes on both sides with a tooth, or, oftenest, a very distinct spine: pronotum anteriorly in the middle not, or only very slightly, tumescent: lateral margins of abdominal segments posteriorly distinctly produced in a lobe or tooth, prominulous before the middle, or, in the middle, in a tooth, or very obtuse small lobule: 2-3 joints of the antennæ amplified on both sides.

Div. PSEUDARADUS.

419. MEGYMENUM BREVICORNE, Fabricius.

Cimex brevieornis, Fabr., Mant. Ins., ii, p. 294 (1787); Gmelin, ed. Syst. Nat., (4), p. 2152 (1788).

Edessa brevicornis, Fabr., Syst. Rhyng., p. 154 (1803).

Amaurus brevicornis, Burmeister, Handb. Ent., ii (i), p. 350 (1835).

Megymenum brevicorne, Dallas, List Hem., i, p. 364 (1851); Walker, Cat. Het. iii, p. 500 (1868); Stål, Hem. Fabr., i, p. 38 (1868).

M. (Pseudaradus) brevicorne, Stäl, En. Hem., i, p. 83 (1870).

Ovate, obscurely cupreous or brassy-black; head black, much canaliculate; antenne short, compressed: pronotum with the sides expanded, spine anteriorly acute: scutellum and hemelytra obscurely cupreous, immaculate: wings sordidly whitish, abdomen above black, beneath eupreous: feet blackish, first pair of femora dentate inwards (Fabr.). Closely allied to M. inerme, Herr. Schäff., differs in having the 2-3 joints of the antenne broader, the former shorter, the latter longer, and the 3-4 joints together longer than the second. The pronotum is unarmed, margins bisinuate; margin of abdomen somewhat dentated. Long, 15 mill.

Reported from China, Assam.

420. MEGYMENUM INERME, Herr, Schäffer.

Amaurus inermis, Herr. Sohäft., Wanz. Ins., v. p. 62, t. 163, f. G. H. (1839).

Megymenum inerme, Dallas, List Hom., i, p. 364 (1851); Walker, Cat. Het., iii,
p. 501 (1868); Distant, A. M. N. H. (5 s.), iii, p. 45 (1879).

M. (Pseudaradus) inerme, Stal, En. Hem., i, p. 86 (1870).

Hardly differs from M. subpurpurascens, Westw., except in having the antenne smaller or more slender, the spines on the anterior angles of the pronotum entirely obtuse, also the angles a little prominent. Long, 15 mill.

Reported from Bengal, Assam, China.

Div. MEGYMENUM.

421. Megymenum subpurpurascens, Westwood.

Platydius subpurpurascens, Westwood, Zool. Jonrn., v, p. 446, t. 22, f. 8 (1834).

Megymenum cupreum, Gnérin, Voy. La Coquille, Zool. Ins., ii, p. 172 (1838);

Am. & Serv., Hist. Nat. Ins. Hém., p. 182, t. 3, f. 10 (1843); Dallas, List Hem., i, p. 363 (1851); Vollenhoven, Fanne Ent. l'Arch. Indo-Néor., iii, p. 47, t. 4, f. 8 (1868);

Walker, Cat. Het., iii, p. 504 (1868).

Amaurus cupreus, Herr. Schäff., Wanz. Ins., v. p. 61, t. 163, f. 503 (1839).

Megymenum meratii, Le Guillou, Rev. Zool., p. 261 (1841).

M. (Megymenum) subpurpurascens, Stål, En. Hem., i, p. 87 (1870).

Head, pronotum, scutellum and corium, fuscous-purple: membrane fulvescent and obscurely veined: antenne and feet black: body beneath purple (Westw.). In stature approaching M. brevicorne, Fabr., but very close to M. spinosum, Burm., from which it differs chiefly in having the angulose posterior part of the pronotum prominulous in a small tooth and the scutellum a little amplified behind the lateral sinus. Le Guillou's, M. meratii is described as:—Fuscous black, pronotum with anterior angles acute, lateral margins anteriorly deeply sinuate, dilated behind the sinus: margin of abdomen sinuate, somewhat dentate. Long, body, 14½-15 mill.; breadth of the abdomen, 8-8½ mill.

Reported from New Guinea, Celebes, Ceram, Borneo, Java, Philip-

pines, Siam, Cambodia, Penang, India, Silhat (mihi).

Genus THALMA, Walker.

Cat. Het., iii, p. 503 (1868).

Body elliptical, convex, very thickly and minutely punctured: head not longer than broad; juga contiguous beyond the tylus, rounded on the outer side and the tips, a porrect spine on each side before the eyes which are not prominent: rostrum reaching the last coxe: antennæ 4-jointed dilated; 2-3 joints dilated; the third much shorter than the second;

fourth fusiform, slender, shorter than the third: pronotum unarmed, sides rounded, posterior angles not prominent, posterior border slightly rounded it sextellum less than half the length of the abdomen, much rounded at the apex: abdomen with the upper apical membrane entire; two broad laminæ beneath: legs stout: tarsi 2-jointed, second joint much longer than the first: hemelytra reaching the apex of the abdomen: membrane with five longitudinal veins and with a few transverse veins. Differs from Megymenum, in the structure of the pronotum, the less reticulated membrane, the stouter body and the sides of the abdomen not dentate.

422. THALMA BIGUTTATA, Walker.

Thalma biguttata, Walker, Cat. Het., iii, p. 503 (1868).

Purplish black, dingy ochraceous beneath: antennæ black, last joint luteous at the apex: pronotum tinged metallic-green on each side: a luteous dot at base and apex of scutellum: beneath punctured black, pectus with three irregular black stripes faintly visible on the venter: abdomen above with luteous spots along each side: legs black: hemelytra blackish; corium beneath dingy testaccous; wings purplish bluo (Walker). Loug, 163 mill.

Reported from Amboina, Burma (?).

Genus Atelides, Dallas.

A. M. N. H., (2 s.) x, p. 359, 436 (1852); Walker, Cat. Hot., iii, p. 500 (1868); Stål, öfvers. K. V.-A. Förh., p. 522 (1867); En. Hem., i. p. 89 (1870).

Body somewhat ovate, broadest behind the middle: head foliaccous; juga reflexed at the sides, much longer than the tylus, with their inner margins contiguous throughout nearly their whole length, gaping slightly at the apex; tylus very small; lateral margins with a strong spine in front of the eyes: eyes very prominent: ocelli small, placed close to the base of the head and about equally distant from one another and from the cyes: antenne 4-jointed, stout, basal joint short, not extending beyond the apex of the head; 2-3 joints prismatic; the second longer than 3-4 together, furnished with three longitudinal furrows; third joint black and hirsute like the second; fourth orange, somewhat pilose, with the base black, perhaps a little longer than the third, elliptical, elongate; 3-4 joints much thinnor than the second : rostrum rather slender, reaching the intermediate coxe, inserted about the middle of the under surface of the head, between two somewhat triangular lamelle; basal joint rather stout, passing the anterior margin of the prosternum; second joint longest, thinner than the first; third joint shorter than the first, about equal to it in thickness; fourth joint shortest and thinnest:

pronotum subquadrate, rather narrower in front than behind, lateral angles slightly spinoso: seutellum short and broad, with the apex broad and rounded: hemelytra very short, covering only the two first segments of the abdomen (not always), with their apical margin truncated, somewhat membranous: sternum with a narrow longitudinal eanal: abdomon nearly eircular, slightly convex above, very convex beneath, with the apex somewhat truncated: the two lateral vulvar plates bearing stigmata: legs stout, femora unarmed; tibiæ prismatie, the postorior pair slightly dilated internally and channelled beneath; anal apparatus, in &, seen from beneath, appears to consist of a plate of a semicircular form, broadly notehed on its posterior margin and occupying a broad emargination of the last segment of the abdomen; seen from above, it presents a eireular corneous ring, the upper portion of which is very narrow, whilst the lower portion is produced and emarginate posteriorly; the opening of the ring is narrowed irregularly by a large tooth on each side, close to which the margin of the ring is elothed with yellowish hairs.

423. Atelides centrolineatus, Dallas.

Atelides centrolineatus, Dallas, A. M. N. H., (2 s.) x, p. 306, 436, t. 5, f. 1-5 (1852): Walker, Cat. Het., iii, p. 500 (1868): Stål, En. Hem., i, p. 89 (1870).

Q. Head abovo, brassy black, somewhat obscure, rather finely rugose, with the lateral margins tiuged with ehestnut, and with a longitudinal orange yellow band down the middle; beneath brownish follows, with the orbits brassy: eyes brown; oeelli yellow: antennæ with the first two joints black, thickly elothed with short stiff hairs, but with the furrows of the second joint naked; basal joint fulvous at the base; apieal joint fulvous : rostrum pale ehestnut with the basal joint fulvous: pronotum blackish, somewhat brassy, with the annular spots near the anterior margin and an indistinct patch within each lateral angle chestnut, the surface minutely punctured and wrinkled transversely; tho dise with a smooth orange-yellow band coutinuous with that on the head; the sides broadly margined with dull orange, with the extreme edges black; seutellum black, very thickly and minutely punctured and transversely wrinkled, with a smooth orange-yellow band continuous with that on the thorax: peetus brownish fulvous, sparingly punetured, with a broad, brassy black, rugose longitudinal band on each side within the lateral margins: legs pale chestnut brown: hemelytra blackish, somewhat brassy, finely granulose; outer margin broadly fulvous, edged with black; the submarginal vein, a streak on the dise and the base of the inner margin fulvous; membrane brown: abdomen above blackish, somewhat brassy, finely granulose, with the sides dull ehestnut irrorated with black points; the middle with a longitudinal orange band continuous

with that on the scutellum: margins pale chestnut-brown, with the edges and a band on each of the sutures black; abdomen beneath pale chestnut-brown, minutely granulated, with a blackish brassy band down each side within the line of stigmata: stigmata black; apical and lateral vulvar plates edged with black (Dallas). Q, long, 19-20; &, 16-17 mill.

Reported from Silhat. The Indian Museum has specimens from Assam.

Add: -Sagriva vittata, Spin., Gen. Ins. Art., p. 117 (1852).

Subfam. Phyllocephalina, Stål.

öfvors. K. V.-A. Förh., p. 645 (1870); l. c. (3), p. 32 (1872); En. Hom., v, p. 117 (1876);—Phyllocephalida, Dallas, List Hom., i, p. 350 (1851);—Phyllocephalida, Stål, Hom. Afric., i, p. 32, 234 (1864).

(a) As in Subfam. Pentatomina (Jl. Pt. II, p. 192, 1887).

(b)—Rostrum short, not extended behind the first coxe, two basal joints very short, entirely, or for the greatest part, hidden between the buceule: head usually foliaceous or elongated and triangular, with the juga produced to a distance before the tylus, and usually contiguous: spiracula of the basal ventral segment hidden by the posterior part of the metastethium: tarsi 3-jointed: antennæ 5-jointed.

Genus Cressona, Dallas.

List Hem., i, p. 358 (1851) : Walker, Cat. Het., iii, p. 494 (1868) : Stål, Hem. Afric., i, p. 234 (1864) ; En. Hem., v, p. 117, 118 (1876).

Body oblong, ovate: head small, gradually narrowed anteriorly, rounded at the apex, sides less strongly dilated; juga contiguous at the apex, not much longer than the tylus; entire antenniferous tubercles prominulous beyond the sides of the head: eyes moderate; ocelli distant, placed very close to the eyes: antennæ 5-jointed, about as long as he head and pronotum, rather stout, basal joint short and stout, passing the apex of the head, remainder nearly equal in length: rostrum 4jointed, passing the anterior coxe, rather stout, basal joint very short, entirely concealed within the deep groove on the underside of the head, third joint longest, fourth a little longer than the second: furrow of the orifices long: pronotum with the lateral angles produced into long, stout, straight horns which project forwards beyond the apex of the head and are somewhat compressed towards the apex which is notched; lateral margins of the pronotum strongly dentate, the denticulations continued along the under surface of the lateral horus and terminating a little before the apex of these in a large flat tooth: scutellum of the usual form and size; frena extended beyond the middle of the scutellum: membrane with longitudinal veins: legs stout, tibiæ quadrangular with the angles prominent, especially on the anterior pair; tarsi 3-jointed, basal joint longest (Dallas).

424. CRESSONA VALIDA, Dallas.

Cressona valida, List Hem., i, p. 358, t. 11, f. 3 (1851); Walker, Cat. Het., iii, p. 49‡ (1868); Stål, En. Hem., v, p. 118 (1876).

2. Entirely ochreous, densely and finely punctured: pronotum with two close lougitudinal lines of brown punctures down the middle: coriaceous part of the hemelytra with some more or less distinct, black points on the middle of the disc; membrane brownish, semitransparent, with numerous brown points: wings trausparent, nearly colourless: abdomen above, brown at the base and within the lateral margins; margins ochreous, punctured: abdomen beneath, thickly punctured with brown, and with numerous black points; 3-5 segments each with a large whitish patch on each side of the disc: pectus brownish obscure with a large shining castaneous-brown patch on each side of the mesostethium: legs concolorous, femora covered with brown points: rostrum with the tip black: antennæ testaceous (Dallas). Long, 25 mill.

Reported from India: Sikkim (mihi).

Genus Dalsira, Am. & Serv.

Hist. Nat. Ins. Hém., p. 175 (1843); Phyllocephala, pt., Dallas, List Hem., i, p. 352, (1851); Walker, Cat. Het., iii, p. 492 (1868); Stål, En. Hem., v, p. 118, 119 (1876).

Head short, almost equally long and broad: antennæ longer than the pronotum: rostrum extending beyond the insertion of the anterior feet: lateral margins of the pronotum rounded, posterior margin truncated, almost straight: soutellum extending a little beyond the middle of the abdomen, sinuated on the sides: membrane almost as large as the coriaceous portion, more or less transparent, with rather regular longitudinal veins: wings a little shorter than the abdomen which is rather a little tumid beneath: feet tolerably robust and short, nearly equal in length (Am. § Serv.).

425. Dalsira glandulosa, Wolff.

Edessa glandulosa, Wolff, Ic. Cim., v, p. 176, t. 17, f. 170 (1811).

Aelia glandulosa, Burm., Handb. Ent., ii (i), p. 357 (1835).

Phyllosephala glandulosa, Dallas, List Hem., i, p. 353 (1851); Walker, Cat. Het., iii, p. 492 (1868).

Dalsira glandulosa, Stål, En. Hem., v, p. 119 (1876); Distant, A. M. N. H., (5 s.) iii, p. 45 (1879).

Antennæ 5-jointed, filiform, black, first joint short: head, pronotum, scutellum and hemelytra obscurely ferruginous; head rounded at the apex, impressly punctured, lateral margins somewhat elevated, impressed at the apex with two small lines which diverge posteriorly; ocelli behind the grevish eyes, distant; rostrum 4-jointed, very short, black, placed between two rounded plates at the base: pronotum impressly punctured, convex, posterior angles prominent, somewhat acute: scutellum longer than half the abdomen, impressly punctured and very finely transversely rugose, with a large deep black, marginal gland on each side at the base, transversely rugose, oblong, placed obliquely, posteriorly girth with a somewhat tumid border: hemelytra very fluely impressly punctured, with six yellow longitudinal lines alternately abrreviated; membrane fuscous, striated whitish: wings cinerescent, veins fuscous: abdomen above fuscous, margin paler, somewhat dentated; beneath brunneous, with a row of elevated points on both sides: pectus concolorous, impressly punctured: anus obtuse: feet unarmed; femora fuscous, with two ferruginous longitudinal lines; tibie angulated, ferruginous, exterior side with 4-5 deep black points: tarsi fuscous, 3-jointed (Wolf). Long, 23 mill.

Reported from China, Bengal, Assam (mihi).

Genus Basichyptus, Herrich-Schäffer.

Wanz. Ins., VII, p. 81 (1844): Stål, En. Hem., v. p. 119 (1876):—Phyllocephala, pt., Dallas, List Hem., i, p. 352 (1851); Walker, Cat. Het., iii, p. 487 (1868).

Dallas included *Phyllocephala*, Lap., *Dalsira*, Am. & Serv., *Schizops*, 'Spinola, and *Basicryphus*, Herr. Schäff., in his genus *Phyllocephala*. The three last occur in India and near them lies *Gonopsis*: they may be thus differentiated:—

- 1-6. Pectus without a levigate streak near the coxe.
- 2-5. Scutellum without a flavescent, continued streak.
- 3-4. Costal margin not, unless anteriorly, levigate or sparingly punctate:—Dalsira.
- 4-3. Costal margin of corium entirely pale, levigate and smoothish, sometimes marked by transverse spots or impressions, or by black points arranged in remote transverse rows:—Basicryptus.

5-2. Continued lateral streak on scutellum, intramarginal before the middle, marginal behind the middle, also entire costal limbus, flavescent:—Schizops.

6-1. Pectus with a levigate lateral streak (posteriorly abbreviated) near the coxe; the streak generally pale:—Gonopsis.

First joint of rostrum is hidden between the oval lateral pieces of the head beneath; second joint free, shortest; 3-4 of equal length; third reaching first coxe; the fourth reaches the middle of the carinate mesosternum: membrane hardly half the size of the coriaceous portion of the hemelytra.

Genus Basicryptus, Herr. Schäff.

Wanz. Ins., vii, p. 83 (1844): Stål, En. Hem., v, p. 119 (1876).

Juga rounded at the apex, contiguous beyond the tylus; first joint of rostrum entirely hidden, second shortest, 3-4 equally long, third reaches the first pair of feet, fourth the middle of the finely ridged mesostethium: membrane half as large as the corraceous portion.

426. BASICRYPTUS ILLUMINATUS, Distant.

Basicryptus illuminatus, Dist., Trans. Ent. Soc., p. 358 (1887).

Body above dull dark reddish, pronotum with a broad, discal, transverse, luteous band, margined black, attenuated at each end, and slightly notched at the middle: eyes dull ochraceous; 1-3 joints of antenne reddish: lateral margins of the pronotum somewhat finely crenulated, the lateral angles broadly and subacutely produced: scutellum with a small luteous spot in each basal angle and a few very small luteous spots at the apex, and with some median and lateral black punctures: base of lateral margin of corium narrowly luteous, and with some very small and irregular scattered black spots: membrane pale hyaline, somewhat thickly ornamented with small fuscous spots: body beneath and legs dull reddish, with black punctures: disc of sternum and some sublateral streaks to abdomen obscure luteous: tarsal joint somewhat ochraceous beneath (Dist.). Long, 14; exp. angl. pron., 10 mill.

Reported from N. India.

Genus Schizops, Spinola.

Schyzops, Ess., p. 297 (1837): Schizops, Am. & Serv., Hist. Nat. Ins. Hém., p. 176 (1843); Stål, pt., Hem. Afric., i, p. 234, 239 (1864); En. Hem., v, p. 118, 120 (1876).

Head triangular, juga produced much beyond the tylus and forming the apex of the triangle, rounded, bifid, the cleft very narrow, contracted hindwards and reduced near the end of the tylus to a simple impression where abut two other like impressions that mark the separation of the three lobes: labrum and rostral canal start from the end of the tylus, the former is transversely striated and covers the whole of the first and at least half the second joint of the rostrum: head beneath convex; the rostral oanal does not reach its base and receives the whole of the first joint of the pronotum and part of the second joint; the rostrum does not reach the mesostethium, the apex of its fourth joint rests on the posterior margin of the prostethium between the first pair of feet; there is no ventral groove: prostethium flat, acuminate, its sides with a simple margin: mesostethium flat, apex tumid, concealing the middle of the first segment: the second segment without spine or protuberance, venter uniformly convex and even somewhat tumid: femora simple; tibiæ triangular, edges not dilated; first joint of tarsi as long as the other two together: abdomen extending beyond the hemelytra: membrane occupying one-third of the hemelytra, veins variable.

Differs from Dalsira, Am. & Serv., in having the lateral streak continued through the scutellum, intramarginal before the middle, marginal behind the middle, also costal limbus, entirely flavescent.

427. Schizops insignis, Walker.

Schismatops insignis, Walker, Cat. Het. iii, p. 495 (1868). Schizops insignis, Stål, En. Hem., v, p. 120 (1876).

Tawny, very thickly and minutely punctured, slightly clouded with blackish beneath: head a little longer than its breadth; juga lanceolate, contiguous, except at their tips: eyes livid, not prominent: rostrum extending to the first coxe: antenne black; second joint a little longer than the third: pronotum between the hind angles with a transverse ridge and an anterior slight metallic-green transverse furrow, the latter abbreviated at each end; space between the ridge and the hind border mostly piecous; hind angles acute, prominent: scutellum piecous, rounded at the tip, with two testaceous stripes which are bordered with bright green on the outer side near the base: legs tawny: hemelytra piecous; costa testaceous; membrane cinereous with many black points (Walker). Body long, 17-18 mill.

Reported from Burma.

Genus Gonopsis, Amyot & Serville.

Hist. Nat. Ins. Hem., p. 180 (1843): Stål, En. Hem., v, p. 121 (1876).

Allied to Megarhynchus, Lap.: head with the juga distant: posterior angles of pronotum very prominent in a pointed spine: extremity of ab-

domen, in $\,\mathcal{F}$, almost straightly truucate; in $\,\mathfrak{P}$, slightly roundly emarginate (Am. § Serv.).

428. Gonopsis Rubescens, Distant.

Gonopsis rubescens, Dist., Trans. Ent. Soc., p. 359 (1887).

Body above sanguineous: head somewhat obscurely punctate; antenuæ reddish, third joint shorter than second or fourth, fifth joint longest and pilose: lateral margins of the pronotum finely crenulate, the lateral angles produced into short subacute spines between which is a transverse ridge, before which the surface is obliquely deflected towards the head; pronotum is also transversely rugulose, except two levigate spots on the anterior area: scutellum longitudinally rugose, with a row of black punctures on the basal half of the lateral margins: corium obscurely punctate and finely rugulose, with a few black punctures near the inner apical angle: membrane pale hyaline: body beneath and legs pale reddish; the body is very finely and darkly punctate, and the tibiae have a fuscous spot on under side of apices (Dist.). Long, 14; exp. angl. pron., 7 mill.

Reported from Sikkim.

Genus Diplorhinus, Am. & Serv.

Hist. Nat. Ins. Hém., p. 178 (1843): Dallas, List. Hem., i, p. 359 (1851); Walker Cat. Het., iii, p. 494 (1868): Stål, En. Hem., v, p. 118, 122 (1876).

Juga prolonged, broad, divaricate, pointed: 2-3 joints of the antenne of equal length: pronotum posteriorly rugose and strongly punctured, lateral angles produced in a process which is obtuse or abruptly somewhat acuminate at the apex, turning outwards, sides crenulate: scutellum less strongly punctured than the pronotum: veins of membrane, straight, black on a pale ground: posterior tibic straight.

429. DIPLORHINUS QUADRICORNIS, Stål.

Diplorhinus quadricornis, Stål, En. Hem., v, p. 122 (1876).

 σ . Very close to *D. furcatus*, Westw., differs in the longer juga, gradually acuminate, more divarience, furnished with straight lateral margins; pronotum more strongly rugose, lateral margins more remotely and more obtusely denticulate, process of the lateral angles twice as long, body narrower ($St\hat{a}l$). Long, 20; broad, $8\frac{1}{2}$; breadth of pronotal processes, $12\frac{1}{4}$ mill.

Reported from N. E. India, Assam (mihi).

430. DIPLORHINUS FURCATUS, Westwood.

Atelocerus? furcatus, Westwood, Hope, Cat. Hem., i, p. 20 (1837).

Phyllocephala distans, Herr. Schäff, Wanz. Ins., vii, p. 71, t. 237, f. 740 (1844).

Orthoschizops? furcata, Walker, Cat. Het., i, p. 232 (1867).

Diplorhinus furcatus, Am. & Serv., Hist. Nat. Ins. Hém., p. 178, t. 3, f. 6 (1843) . Dallas, List Hem., i, p 359 (1851); Walker, l. c. iii, p. 494 (1868): Voll., Faune Ent. l'Arch. Ind. Néerl., iii, p. 41 (1868): Stâl, En. Hem., v, p. 122 (1876).

Fuscous; hemelytra and scutellum a little paler: head large, porrect, bifurcate: antennæ short, very slender, pale: pronotum scabrous, sides serrate and posteriorly produced on both sides in a prominent angle: median line ou hemelytra, blackish: membrane hyaline, with eight straight, black, longitudinal veins: feet lutescent (Westw.). In. P. distans, H. S., the lateral margin of the hemelytra and a small longitudinal line at base of the scutellum are ochreous; beneath dark brown, more red-brown posteriorly: feet yellow-brown. Long, 18-19 mill.

Reported from Java, Sumatra.

Genus Macrina, Amyot & Serville.

Hist, Nat. Ins. Hém., p. 179 (1843): pt., Dallas, List Hem., i, p. 360 (1851); Walker, Cat. Het., iii, p. 496 (1868): Stál, Hem. Afric., i, p. 234, 244 (1864); En. Hem., v, p. 118, 122 (1876).

Body oblong-ovate: head triangular; juga flat, very acute, contiguous or somewhat so; in Indian species, the second joint of the antennæ extends at least by half beyond the apex of the head: sides of pronotum produced behind the middle in a gradually acuminated process, turning outwards and more or less forwards: posterior angles of the genitalia, in J, hardly prominulous, rounded.

431. MACRINA DILATATA, Distant.

Macrina dilatata, Distant, A. M. N. H., (5 s.) iii, p. 45, 52 (1879): Waterhouse, Aid, t. 6.

Broad, ovate: head broad, triangular, moderately covered with deep dark punctures; juga slightly sinuated, divided at the apex, meeting beyond the tylus which is much shorter: antennæ with the third joint shortest; fourth rather longer; fifth longest, black, with the base rufous (the first four joints vary in different specimens from rufous to luteous): rostrum reaching anterior coxe: pronotum with the base slightly rugulose, somewhat crescont-shaped in front where it is bordered with a pale luteous band between the lateral angles, which are produced into two stout spines directed forwards; spinal apices black: anterior portion of the pronotum abruptly deflexed to the head, transversely costate, moderately punctured with brown; lateral borders denticulated: scutellum reaching beyond the base of the membrane, with five longitudinal, indistinct, somewhat catenulate elevated ridges, which are sprinkled with luteous, the median ridge generally most indistinct: membrane pale fuscous, extending beyond the apex of the abdomen: beneath and legs concolorous, thickly and finely punctured with brown: tibiæ sulcated (Distant). β , long 16, breadth at base of corium 8; exp. angles pronot. 11 millims. φ , long 17, breadth at base of corium, $8\frac{1}{2}$, exp. angles pronot. 12 millims.

This species approaches M. coccinea, Walker, but differs in its much greater breadth: some specimens are of a much darker colour than others.

Reported from the Naga hills 2000-6000 feet; N. Khasiya hills 1500-3000 feet.

432. MACRINA COCCINEA, Walker.

Macrina coccinea, Walker, Cat. Het., iii, p. 497 (1876); Distant, A. M. N. H., (5 s.), iii, p. 45 (1879).

Bright red, very elongate-oval; head acute, a little longer than broad; tylus transversely striated; juga contiguous, obliquely striated; eyes not promiuent: rostrum partly black, extending to the first coxe: antennæ slender; second joint much longer than the third, as long as the fourth; fifth longer than the fourth, sometimes mostly black: pronotum and scutcllum transversely rugulose; the former with a ridge between the posterior angles, which are acute, elongated and slightly inclined forward; sides in front serrated; a transverse, sometimes testaceous, callus on each side near the anterior margins: scutellum much attenuated, rounded at the tip, with a few or many yellow speckles: abdomen truncated at the tip; legs slender: hemelytra thickly and minutely punctured; membrane pellucid (Walker). Body long, 14½-15 mill.

Reported from Penang, India, Assam, Sikkim (mihi).

Genus Tetroda, Am. & Serv.

Hist. Nat. Ins. Hém., p. 177 (1843); Dallas, List Hem., i, p. 355 (1851); Walker, Cat. Het., iii, p. 493 (1868); Stål, Hem. Afric., i, p. 234 (1864); En. Hem., v., p. 118, 122 (1876).

Head with the juga long, gradually acuminate, slightly diverging outwards, somewhat straight, and tip slightly rounded; narrowed from the eyes, not incised at the eyes, lateral margins for the most part straight: second joint of antenna a little shorter than the third, rest almost equal in length: sides of pronotum laminated, produced anteriorly in a depressed porrect process, sides scarcely crenulate: scutcllum extending scarcely beyond the middle of the abdomen, ending in a rounded point: veins of membrane rather straight.

433. Tetrodes histeroides, Fabricius.

Acanthia histeroides, Fabr., Ent. Syst. Suppt. p. 526 (1798).

Aelia furcata, Fabr., Syst. Rhyng., p. 188 (1803): Stoll, Punaises, p. 109, t. 28, f. 197 (1788).

Aelia histeroides, Fabr., Syst. Rhyng., p. 189 (1803).

Phyllocephala furcata, Herr. Schäff., Wanz. Ins., vii, p. 70, t. 237, f. 738 (1844).

Megarhynchus 4-spinosus, Westw., Hope, Cat. Hem., i, p. 19 (1837); Walker, l.

e. p. 493 (1868)?

Tetroda histeroides, var. sumatrana, Ellenr. Nat. Tijds. v. Ned. Ind., xxiv, p. 171 (1862).

Tetroda histeroides, Am. & Serv., Hist. Nat. Ins. Hém., p. 178 (1843); Dallas, List Hem., i, p. 356 (1851); Walker, Cat. Het., iii, p. 493 (1868); Stål, Hem. Fabr., i, p. 41 (1868); En. Hem., v, p. 122 (1876); Vollenhoven, Faune Ent. l'Arch. Indo-Néer., iii, p. 41 (1868); Distant, A. M. N. H., (5 s.), iii, p. 45 (1879); Scott, Trans. Ent. Soc., p. 306 (1880).

Head black, bifid, with the rostrum inserted below the lobes; pronotum obscure, flat, the anterior angle much produced on both sides, somewhat spinose: scutellum black with a white marginal line on both sides: hemelytra black: body obscure (Fabr). Long, 17 mill.

Reported from Java, Burma, Bengal, Sikkim (mihi), Assam (mihi), Sinkip island.

434. TETRODA DIVARICATA, Dallas.

Tetroda divaricata, Dallas, List Hem., i, p. 356 (1851); Walker, Cat. Het., iii, p. 493 (1868); Stäl, En. Hem., v, p. 124 (1876).

J. Fiscous, punctured: juga divaricate: membrane whitish, veins black: body beneath more obscure: antennæ black, two basal joints fuscous (Dallas). Long, 13-14 mill. Hardly different from T. historoides, Fabr.

Reported from Nepál, Sikkim (mihi).

- 435. Tetroda atomaria, Dallas, List Π em., i, p. 356 (1851); Walker, Cat. Het., iii, p. 493 (1868).
- of. Head testaceous, thickly and faintly punctured; juga nearly meeting at the apex, lateral margins straight; pronotum with the auterior portion testaceous, obscure, punctured, becoming dark brown posteriorly, with numerous small elevated testaceous points: scutellum

dark brown, nearly black, punctured, with numerous small warts similar to those on the pronotum, and on each side at the base a yellow impunctate line, which tapers to a point posteriorly: coriaceous portion of the hemelytra dark brown, punctured, with several irregular longitudinal testaceous lines formed of small raised points; membrane whitish, opaque: body beneath testaceous, with an interrupted black band down each side within the lateral margins, on the line of the stigmata; stigmata white: pectus punctured with brown: legs testaceous; femora punctured with brown: rostrum pale testaceous: antenuæ yellowishwhite (Dallas). Long, 12½ mill.

Reported from N. India.

436. TETRODA BILINEATA, Walker.

Tetroda bilineata, Walker, Cat. Het., iii, p. 494 (1868).

Fawn-colour or blackish, or of an intermediate hue, very thickly and minutely punctured: head very much longer than broad; juga separate, lanceolate, twice the length of the tylus: eyes rather prominent: rostrum extending to the first coxe: antenne black, about one third the length of the body; second joint a little longer than the third; fourth longer than the second; fifth a little longer than the fourth: pronotum and scutellum transversely and slightly striated: pronotum with the anterior angles porrect, much elongated, very acute: scutellum attenuated rounded at the tip, with two whitish stripes which taper and converge from the base nearly to the tip and are bordered with black on the outer side: abdomen beneath in the blackish individuals of a dull dark red huc: membrane cinercous; voins black (Walker). Body long, 14-17 mill.

Reported from Java, Sumatra, Malacca, Burma, India, Sikkim (mihi).

Genus Gellia, Stål.

Hem. Afric., i, p. 234, 243 (1864); En. Hem., v, p. 118, 122 (1876).

Body oval: head much dilated, foliaceous, lateral margins distinctly incised at the eyes, abruptly dilated at the eyes and forming an angle, thence rounded before the incisure; juga very slightly distant: anterior lateral margins of the pronotum produced forwards in a depressed lobe.

437. Gellia nigripennis, Dallas.

 $\it Tetroda\ nigriponnis,$ Dallas, List Hem., i, p. 357 (1851) ; Walker, Cat. Het., iii, p. 493 (1868).

Gellia nigripennis, Stål, En. Hem., v, p. 123 (1876).

 σ . Reddish testaceous, thickly and finely punctured: head with 14

the lateral margins abruptly dilated a little before the eyes; juga foliaceous, rounded externally and nearly meeting at the apex: pronotum faintly
rugose transversely, and with a distinct transverse ridge not far from
the posterior margin: scutellum with its lateral margins brownish and
with a black streak at each side at the base: hemelytra with the disc
brownish; membrane black: margins of the abdomen ferruginons: body
beneath with an irregular blackish band on each side on the line of the
stigmata which are white: legs testacous; tibiæ at the apex and the
tarsi ferruginous: rostrum and antennæ testaceous, the latter somewhat
ferruginous (Dallas). Long, 123-13 mill.

Reported from N. India, Karachi (mihi).

438. Gellia obtusa, Dallas.

Tetroda obtusa, Dallas, List Hem., i, p. 357 (1851); Walker, Cat. Het., iii, p. 493 (1868).

Gellia (?) obtusa, Stäl, En. Hem., v, p. 124 (1876).

of. Testaceous, very thickly and finely punctured: head with the juga foliaceous, rounded at the apex, with the inner angles obtuse, not meeting; lateral margins with a minute black spine, tipped with yellow, on each side in front of the oyes: pronotum with an indistinct, transverse ridge near the hinder margin: scutellum with several scattered black points, and a black streak on each side at the base: membrane whitish, opaque: abdomen beneath thickly and rather coarsely punctured, with a large transverse impunctate pit on each side of each segment, touching the posterior margin of the preceding segment; the space around each of the stigmata with an irregular patch of black punctures: pectus rather coarsely punctured, with a few scattered black points, and a black shining spot on each side of the metastethium: legs testaceous; femora with brown points: rostrum testaceous, with the apex black: antenne testaceous (Dallae). Long, 13½-14 mill.

Reported from N. India.

Genus MEGARHYNCHUS, Lap.

Ess. Hém., p. 65 (1832); Am. & Serv., Hist. Nat. Ins. Hém., p. 179 (1843); Dallas, List Hem., i, p. 361 (1851); Walker, Cat. Het., iii, p. 498 (1868); Stål, Hem. Afric, i, p. 234 (1864); En. Hem., v, p. 118, 123 (1876).

Body very elongate: head very long, ending in a sharp, bifid point, the bifurcation so close as to appear above but a longitudinal groove in the middle of the head: eyes very small, hardly prominulous: antenna long, b-jointed, first very short, rest of equal length to cach other: rostrum very short, hardly reaching the insertion of the first pair of feet,

joints rather equal: pronotum nearly continuing the triangle formed by the head, without posterior spines turning forwards; posterior angles not prominulous: scutellum elongate, rounded at the tip, extending a little beyond the half of the abdomen: hemelytra hardly allowing the margin of the abdomen to be seen; membrane shorter than the coriaceous portion: wings shorter than the henelytra: abdomen flat above, slightly tunnid beneath, elongate, as broad at its base as the pronotum gradually narrowing and abruptly truncate at the tip, nearly at the end of the hemelytra: feet robust, long, unarmed; tarsi long (Am. § Serv.).

439. MEGARHYNCHUS ROSTRATUS, Fabricius.

Aelia rostrata, Fabr., Syst. Rhyng., p. 188 (1803): Burm., Handb. Ent. ii (i), p. 357 (1835).

Lygaus hastatus, Fabr., Syst. Rhyng., p. 239 (1803).

Megarhunchus elongatus, Laporte, Ess. Hém., p. 65 (1832).

Megarhynchus hastatus, Dallas, List Hem., i, p. 361 (1851); Walker, Cat. Hem.,

iii, p. 498 (1868): Voll., Faune Ent. Ind. Néer., iii, p. 42 (1868).

Megarhynchus rostratus, Am. & Serv., Hist. Nat. Ins. Hém., p 180 (1843): Herr. Schäft, Wanz. Ius., ix, p. 303, t. 323, f. 999 (1853): Ellenr., Nat. Tijddskr. Ned. Ind., xxiv, p. 172, f. 31 (1862); Stål, Hem. Fabr., i, p. 41 (1868); Ofvers. K. V.-A. Förh., p. 645 (1870); En. Hem., v, p. 123 (1876).

Clypeus of the head very long, bifid, with acute lobes; head, pronotum, hemelytra, body and feet, einereous, immaculate; antenne alone entirely rafous (Æ. rostrata, Fabr.). Very elongate: head porrect, subulate, acute, sulcate in the middle: antenne inserted beneath the head, pale at the base, rufous at the apex: pronotum smooth, a little produced on both sides posteriorly, pale deep black before the margin: the margin itself white: soutcllum elongate, smooth, flavescent; margin whito: hemelytra ferruginous, margin white: wings hyaline: body flavescent, with a deep black spot on both sides at the apex (L. hastatus, Fabr.). Long, 20 mill.

Reported from Philippiucs, Java, Sumatra, Cambodia, Cochin-China, Siam, Burma, India, China, Sikkim (mihi).

440. MEGARHYNCHUS TRUNCATUS, Westwood.

Megarhynchus truncatus, West., Hope, Cat. Hem., i, p. 20 (1837); Dallas, List Hem., i, p. 361 (1853): Walker, Cat. Het., iii, p. 498 (1868): Voll., Faune l'Arch. Ind. Néer., iii, p. 43 (1868): Stål, En. Hem., v, p. 123 (1876).

Megarhynchus testaceus, Am. & Serv., Hist. Nat. Ins. Hém., p. 180 (1843): Walkor, I. c., iii, p. 498 (1868).

Large: sub-parallel, testaceous-luteous, punctured fuscous: head acuminate, scarcely bifid, pronotum simple, as broad as the abdomen,

sides oblique, serrated: hemelytra fuscous, marked with palo lines: apex of the abdomen truncated (Westw.). Form somewhat similar to the broader examples of M. rostratus, Fabr., head and pronotum punctured fuscous; anterior lateral margins of the pronotum narrowly pallescent, not so strongly transversely rugose; distinct median longitudinal line and fine anterior transverse wrinkle levigate; posterior angles produced in an acuminate tooth (Ståt). Long, 21 mill.

Reported from Java, Penang, India, China, Assam (mihi).

441. MEGARHYNCHUS LIMATUS, Herr. Schäff.

Megarhynchus limatus, Herr. Schäff., Wanz. Ins., ix, p. 303, t. 322, f. 998 (1853) : Stål, En. Hem., v, p. 124 (1876) : Distant, A. M. N. H., (5 s.), iii, p. 45 (1879).

Elongate-obovate, broadest over the pronotum: head bifid, a little longer than broad: pronotum and scutellum grossly punctured, transversely rugose: sides of pronotum scrulate, roundly prominulous and moderately acute, though the angles are hardly prominent: scutellum with five weakly elevated longitudinal lines: the hemelytra finely punctured between the elevated veins: dark ochreous yellow; the feet more ferruginous; hemelytra between the veins, purple-red. Like and closely allied to *M. truncatus*, Westw., from which it differs in having head and pronotum shorter, stature broader, punctuation stronger, concolorous or weakly ferruginous, rarely fuscous on the head: the lateral margins of the pronotum are not pallescent, they are strongly rugose, posterior angles slightly and somewhat obtusely prominulous, no levigate longitudinal line or only a very obsolete one, no anterior transverse wrinkle or ridge. Long, 20-21 mill.

Reported from Assam (mihi).

442. MEGARHYNCHUS TRANSVERSALIS, Westwood.

Tetroda transversalis, Westw. in Royle's III. Bot. Him, p. liv, t. 10, f. 7 (1839); Dallas, List Hem., i, p. 356 (1851); Walker, Cat. Het., iii, p. 493 (1868).

Megarhynchus (?) transversalis, Stål, En. Hem., v, p. 124 (1876).

Fuscous-black: acutely bicornuted; anterior angles of pronotum produced acutely forwards: pronotum and scutellum transversely striated: corium black, very thinly punctured; membrane whitish: antennæ and feet black (Westw.). Long, $15\frac{1}{2}$; broad, $7\frac{1}{4}$ mill.

Reported from the Himalaya.

443. MEGARHYNCHUS DIVERSUS, Walker.

Megarhynchus, diversus, Walker, Cat. Het., iii, p. 498 (1868).

Testaceous, subfusiform, narrowest at the tip of the abdomen, thick-

ly and minutely punctured; some of the punctures black: head a little longer than broad; juga lanceolate, connected: eyes not at all prominent: rostrum extending to the fore coxe: antennæ slender, second joint much longer than the third, as long as the fourth; fifth longer than the fourth: pronotum with the posterior angles prominent and nearly rectangular; sides in front serrated: scutellum attenuated, rounded at the tip, with some black speckles along each side near the base: abdomen with the hind angles of the apical segment extending beyond the anal appendage: hemelytra more minutely punctured than the pronotum: membrane pellucid (Walker). Long, 12½ mill.

Reported from India. Differs from M. truncatus, Westw., in having the posterior angles of the pronotum more doterminate and the thorax more abruptly contracted.